AT THE EDGE

An exploration of the boundary condition between architecture and nature

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This dissertation is submitted in partial fulfillment of the requirements for the degree of Master in Architecture (Professional) in the School of Architecture, Planning and Geomatics, University of Cape Town.

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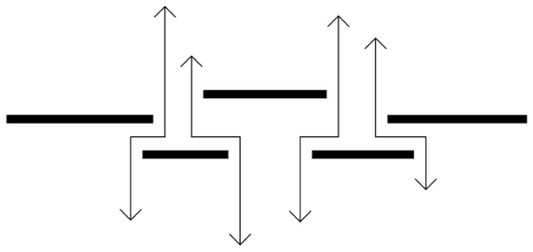


ABSTRACT

An interest in abandoned and derelict landscapes as environmentally appropriate spaces for architectural interventions led my dissertation research to the theoretical concept of terrain vague. The terrain vague sites found within the City of Cape Town revealed that it is the edge condition which differentiates these spaces as being outside the realm of the normative city. The unravelling of the edge from a state of order to disorder took my research to the historical fortifications of Table Bay and specifically, the Settlement's eastern boundary demarcated by the French Lines. A combination of redoubts and connecting rampant walls which marked the boundary between the order of the European settlement and the wilderness beyond. The Central Redoubt is the only remnant of these structures and is located on Trafalgar Park in the suburb of Woodstock. Trafalgar Park is surrounded and fragmented by a variety of boundary conditions and controlled access which results in the Park being severely underutilised. The dissertation design project looks at re-activating Trafalgar Park through the manipulation of its various edge conditions. The transformation of boundaries into pedestrian routes and public space around points of interest aims to improve accessibility and encourage connections between the Park and surrounding context. The Swimming Pool Precinct was chosen as the site for the architectural intervention as it is an impacted site that offers the opportunity to increase activity and improve the connection between the north and south of the Park. The interrogation of the boundary condition between architecture and nature through the design of edges and thresholds is the driving concept behind the architectural design. The dissertation design project aims to demonstrate that appropriate architectural interventions are able to increase activity in public areas within the City of Cape Town without the need for fences and controlled access.

TABLE OF FIGURES

ALL IMAGES BY THE AUTHOR, UNLESS OTHERWISE STATED

INTRODUCTION

Figure 1: An aerial view highlighting the section line between Devil's Peak and the Harbour (Chief Directorate of Surveys and Mapping).

The construction of a modernist transportation network and the implementation of segregation policies during the apartheid era, dramatically altered Cape Town's social and physical character between 1950 to the 1970's (Wilkinson, 2000:197). The legacy of these decisions still dominates the urban landscape of the City centre today, with vast areas of undeveloped desolate land in the inner City while urban sprawl continues unsustainably on the periphery. My interest in degraded brownfield or underutilised sites as appropriate areas for architectural interventions led to Ignasi de Solà-Morales Rubió (hereafter referred to as Solà-Morales) theoretical concept of the terrain vague. The in-between, 'non-space' of the unincorporated margins of urban landscapes and the interior islands of ambiguous space within the city became a starting point for my research (Barron, 2014:4). The discovery that the unravelling of the edge condition from a state of order to disorder is what gives terrain vague space its unique quality, led my to interest in the boundary condition between order and chaos, between architecture and nature.

Figure 2: An aerial view of Trafalgar Park located in the suburb of Woodstock, Cape Town (Chief Directorate of Surveys and Mapping).

Identifying the historical eastern boundary of the old Cape Settlement along the section between Devil's Peak and the Harbour revealed the French Lines and its remaining remnants on Trafalgar Park in Woodstock. This led my research to the fortifications of Table Bay as the initial architectural structures that were built to instil order and control over the Cape of Good Hope. The various lines of defence built in Table Bay depict the story of a constant pursuit for order and control. The majority of the fortifications were left to deteriorate, as the British gained authority of the Cape in the 1800's and were later largely demolished to make way for development. Trafalgar Park is fenced off, like so many parks within the City of Cape Town, in an effort to control access and deter criminal activity. These barriers and controlled and limited access result in parks being underutilised and inevitably isolated and unsafe. Trafalgar Park has been considerably fragmented by fences, walls and infrastructure developments resulting in the Park being under-used. The focus of my dissertation will be to re-activate Trafalgar Park through the manipulation of boundary conditions and create a sense of order versus disorder through the return of nature. The Swimming Pool Precinct on Trafalgar Park is the focal area for the architectural intervention of my dissertation, with the aim of improving and activating the underutilised facilities, while reconnecting the disconnected areas of the Park. Before proceeding with the proposed interventions at Trafalgar Park I will go through a brief explanation of terrain vague and examine the edge conditions which differentiates these spaces from being of a part of the city.

TERRAIN VAGUE

_A Search for Site

Figure 3: A photograph of the Cape Town City Bowl from Lion's Head.

In the mid-nineties Catalonian architect and professor, Solà-Morales characterized vacant derelict space as terrain vague. The French term terrain suggests an undefined portion of land which possesses an urban quality absent in the English word land, which implies something rural or geological (Sola-Morales, 1995:119). Vague from the German word *woge* for wave, implies a sense of movement and instability which can be linked to the fluctuations and transitions that urban environments undergo over time. The Latin *vacuus* for vague, led to the words vacuum and vacant in English, which signify the unoccupied and in-determinant (Sola-Morales, 1995:119 and Barron, 2014:5). These indeterminate counter spaces are referred to as abandoned derelict wastelands or transgressive zones (Barron, 2014:4). They are often experienced as polar opposites, either possessing negative nuances of socio-economic deterioration or violent histories of displacement, or as positive open spaces that are void of regulation and restrictions and are seen as spaces of freedom outside the confines of society (Barron, 2014:2 & Levésque, 2002). The term terrain vague contains a multiple of connotations, however, the prominent view suggests a portion of land which holds the potential for development within an urban environment while possessing an underlying expectancy of freedom in its emptiness (Sola-Morales, 1995:119).

An understanding of where Solà-Morales is from, provides an insight into his theoretical concept of terrain vague and allows the dissertation to relate the concept in a comparative manner to the City of Cape Town. Barcelona is geographically similar to Cape Town, a port city surrounded by ocean on one side and mountains on the other. This confinement caused Barcelona to evolve into an incredibly dense urban environment, while Cape Town, a much younger city with a troubled history of relocations programmes, is left with an abundance of open space. The types of spaces that Solà-Morales refers to as terrain vague can be broadly categorised as spaces that have no apparent ownership and seem to be in a state of abandonment, often with the presence of dereliction and natural wilderness (Franck, 2014:154).

In a dense city like Barcelona, where spaces tend to be strictly defined by design and regulation, abandoned spaces offer an exciting platform for alternative or transgressive activities (Franck, 2014:154).

The openness of terrain vague space provides an availability for unintended activity outside the increasingly commodified, regulated and privatised open spaces found within the city (Barron, 2014:3). These activities may include small scale vending, religious gatherings, temporary accommodation, political demonstrations, artistic interventions and other alternative types of recreation (Franck, 2014:157).

The externality of terrain vague space can be thought of as being physically exterior to the urban fabric as well as economically, socially and temporally marginal to the city (Franck, 2014:157).When looking at Barcelona it is clear why Solà-Morales advocates the need for undefined open space in a sprawling landscape of built fabric and predetermined public space. The following section will examine a number of terrain vague spaces found in the inner city of Cape Town and discuss specifically why this context requires an alternative lens to Barcelona.

Figure 4: A panoramic photograph of the Cape Town City Bowl illustrating the vast open spaces that can be found within the city centre.

Figure 5

Figure 6

Figure 7

Figure 8

In order to locate and understand the terrain vague spaces within the urban centre of Cape Town, I looked towards Solà-Morales discussion on the relevance of photography as an index to our cities and its ability to steer our perception of place (Solà-Morales, 1995:119). The role of the photographer is therefore significant, as they are able to shape our understanding of a city through their cognitive lens. An interest in empty and abandoned spaces can be emphasised through photography by portraying the presence of Solà-Morales's notion of the terrain vague by highlighting certain characteristics, thus influencing the manner in which we see and experience these spaces (Solà-Morales, 1995:119). This led me to the work of a number of photographers which are known for capturing the vacant spaces of the post-industrial landscape. Understanding the composition of their images, was the starting point for my photographic expedition of the design dissertation's focal area. My intention was to capture spaces in the area between Devil's Peak and the Harbour which embodied the characteristics of terrain vague in a manner which emphasized these qualities from my perspective. This was achieved by purposely exploring the area on a Sunday afternoon, to ensure there would be limited vehicles and people and capture the void of activity in these spaces. A portrait composition was used to highlight the vast emptiness of the site by foregrounding the uninhabited ground and keeping the surrounding buildings and landscape in the background. The photographs were then developed in black and white to further portray the blankness of the space. The photographic investigation into the terrain vague sites in the focal area between Devil's Peak and the Harbour illustrate that the noticeable difference between the terrain vague as described by Solà-Morales, is that the open and vacant spaces encountered within the urban fabric of Cape Town, rarely accommodate positive nuances. These spaces are desolate, uncared for and possess a sense of decay and criminality. The pockets of terrain vague scattered in and around central Cape Town are a result of economic decline, neglect, divisive transportation routes or from forced removals during the apartheid era.

The photographs on the left are taken by photographers which Solà-Morales mentions when discussing photography as an index to the city.

Figure 5: *Barcelona* by Manolo Laguillo.
Figure 6: *Kansas* by David Plowden.
Figure 7: *Swansea* by John Davies.
Figure 8: *Cosby Street, New York* by Thomas Struth.

The following pages illustrate various photographs I took of the terrain vague spaces within the City of Cape Town.

Figure 9: District Six below Devil's Peak.
Figure 10: Below the elevated highway.
Figure 11: An unoccupied site in central Woodtsock with remants of an old building.
Figure 12: Railway lines in central Woodstock.


BUILDERS HARDWARE
BALTIC

THE EDGE CONDITION

_Order versus Disorder

An analysis of the terrain vague which I encountered reveals the unravelling of the edge condition from a state of order to disorder, where chaos returns in the form of nature through the growth of vegetation and the weathering of existing built fabric. The edge condition of these spaces is the threshold of transition from being of the city to being void. The crumbling of boundaries as the landscape is left to become overgrown and derelict produces the counter-spaces that constitute a 'confrontation and contamination between the organic and the inorganic, between nature and artifice' (Stalker, 1996). The permeable boundaries assume a collapse of care, as vegetation shares its ephemeral territory with rubbish and dumped debris in the spaces that hold a place outside the norms of society. Beyond the edge are the remnants of old buildings and structures which emit feelings of nostalgia and desolation for what was. Solà-Morales characterises this sense of strangeness as the result of change and the breakdown of consistency in the life of the city (Solà-Morales, 1995:121). The collapse of the edge condition is the boundary between the order and controlled environment of being of the city, to the place of disorder which allows the freedom for alternative activities. The sense of estrangement which is felt when engaging with the terrain vague arises out of the internal questioning of what is to be done with these undefined spaces (Sola-Morales, 1995:122). Architects have the tendency to impose order and form onto the chaotic, often in a violent transformation of these spaces (Solà-Morales, 1995:122). In Cape Town, where there is an abundance of undefined space, there is a need for a more defined and structured development that provides society with a sense of identity and empowerment. The excessive nodes of abandoned spaces in the City centre accommodate illicit activities, making them undesirable for the opportunities which Solà-Morales advocates that vacant sites provide.

Cape Town has a wealth of natural open space, providing beautiful environments for recreational activities. The lack of density and large amounts of open space results in the public parks of the City becoming deserted places that are underutilised.

Figure 13: A photograph illustrating the edge condition on one of the terrain vague sites which depicts the contrast between the order of the pavement and the chaos of the site.

Figure 14: Drawings of various edge conditions found on a number of discovered terrain vague.

Figure 15: Textures of weathered materials found on terrain vague sites.

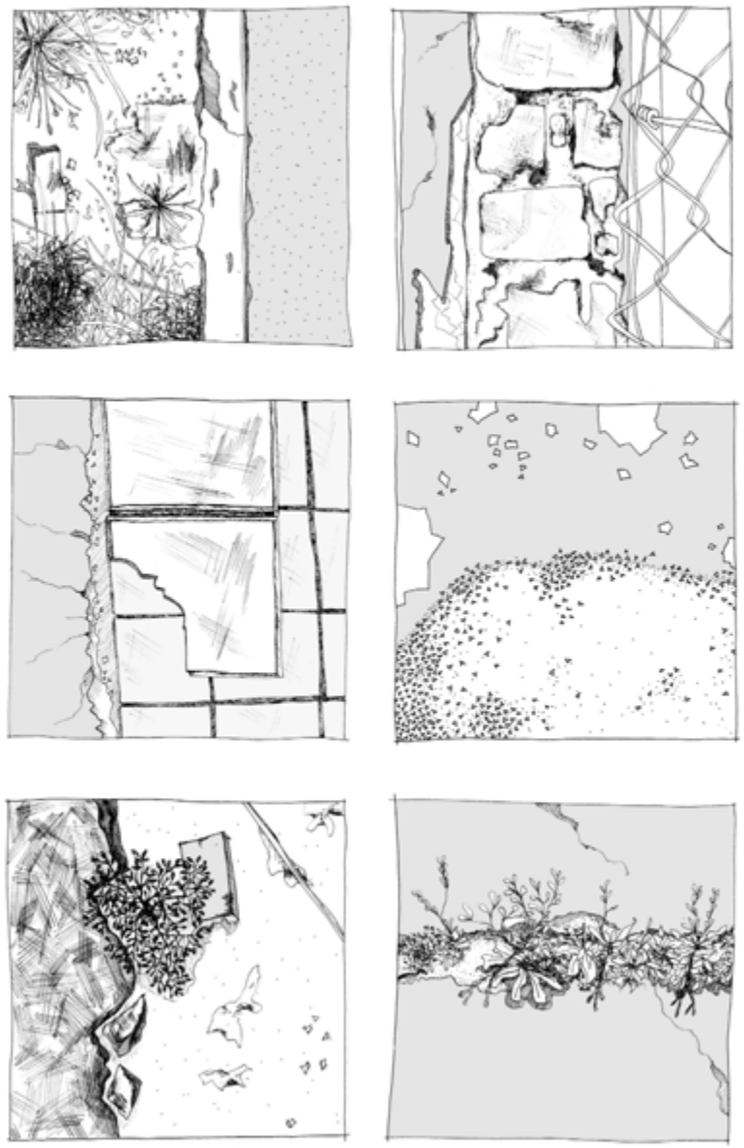


Figure 14

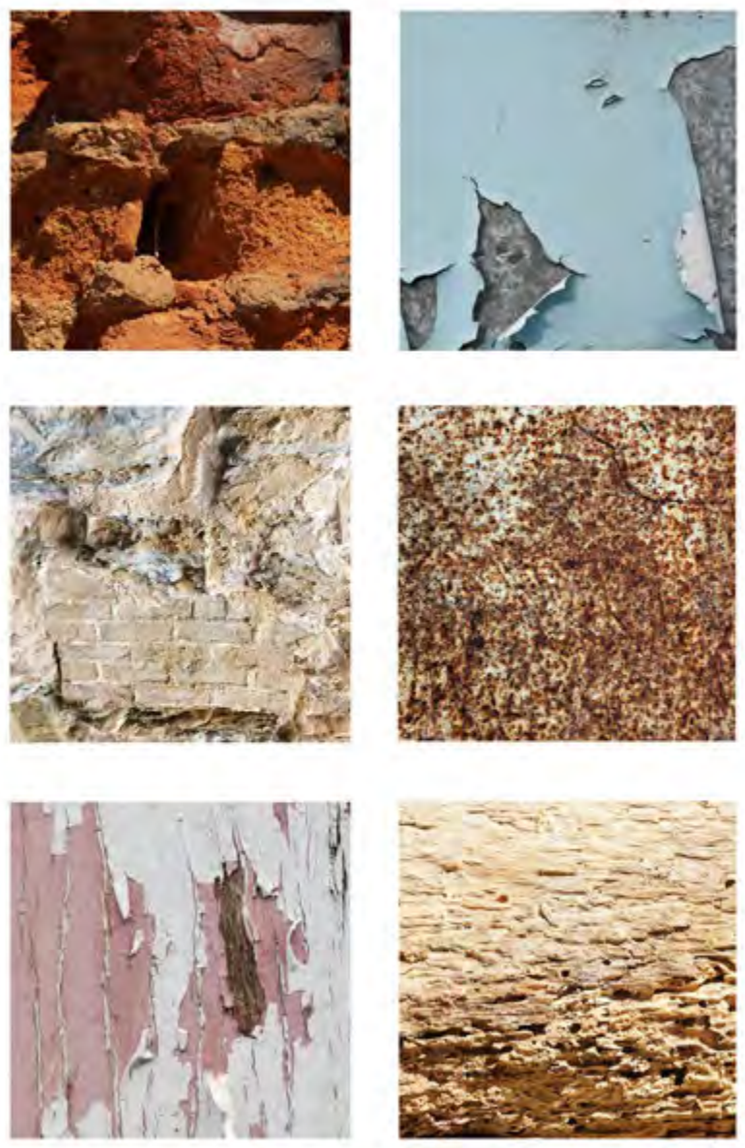


Figure 15

Figure 16: Initial site analysis of Trafalgar Park illustrating its piecemeal nature as a result of various edge conditions.

The terrain vague spaces in the City of Cape Town seem to be disconnected from the city, seldom offering positive spaces of freedom for alternative and creative activities. In Cape Town it is the public parks that accommodate craft and food markets and occasional (usually privatised) music festivals, while the abandoned sites provide parking space, always with the assistance of a car guard for putative security. Security is a major concern in public areas and numerous parks have been enclosed by barriers and controlled access times to prevent vagrancy and illicit activities. The development of underutilised parks in the City of Cape Town, in a manner which encourages freedom of activity while maintaining a safe environment, would hold the potential that Solà-Morales prescribes to the terrain vague spaces of incredibly dense urban environments. Cape Town has a history of dominance and control, with the European settlers demonstrating their ownership of the land through the development of defence lines and fortifications around the Cape Peninsula. The natural border created by Table Mountain together with heavy fortifications at the settlement of Table Bay, enclosed the Cape Settlement from the disorder of the wild and defended the settler's control of the land. The section between Devil's Peak and the Harbour was fortified by a combination of defence lines which protected the Settlement from an eastern attack. The eastern boundary of the Settlement was marked by the French Lines, remnants of which can be found in Trafalgar Park on the eastern boundary of the suburb of Woodstock. Trafalgar Park is rife with various boundary and edge conditions that have severely fragmented the Park, limiting accessibility and use. Trafalgar Park is not a terrain vague as it has a prescribed purpose as a public park, however, it is considerably underutilized and has the potential to become an active public space that can accommodate the activities which Solà-Morales prescribes to the terrain vague of dense urban environments. The possibility of re-activating an underused public space led to Trafalgar Park becoming the focal area for the dissertation design project. The discovery that the line between the order of the old Cape Settlement and the disorder of the wilderness lay within the focal area for the dissertation, led the research to an analysis of the Fortifications of Table Bay.

FORTIFICATIONS OF TABLE BAY

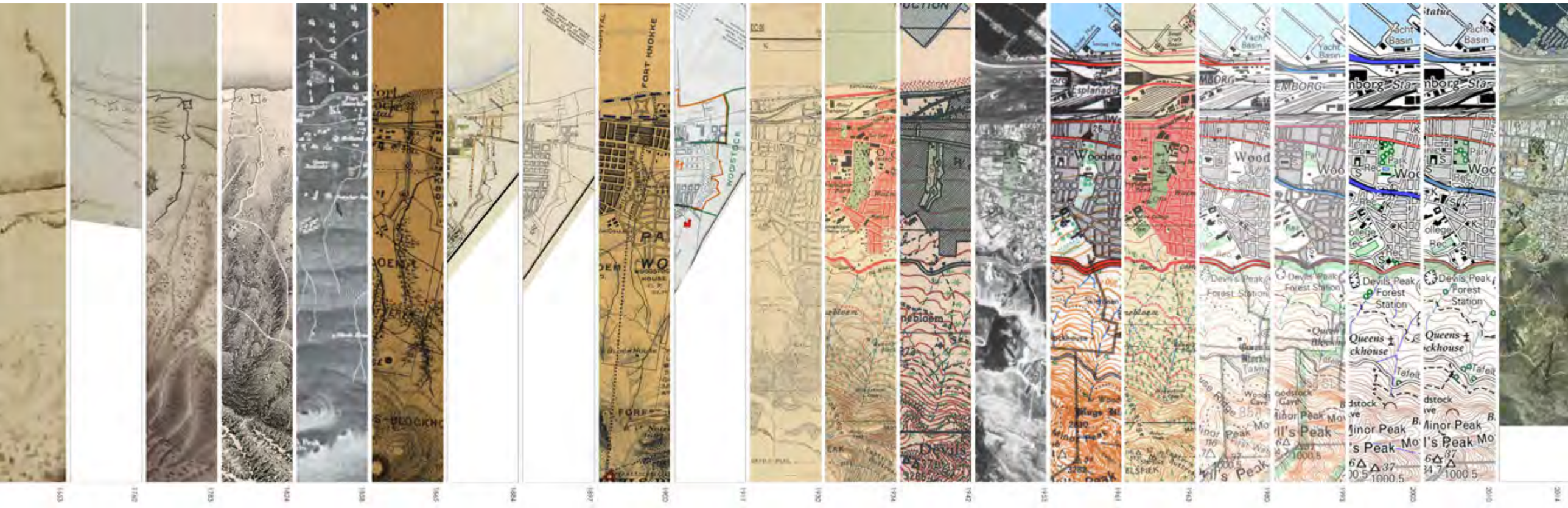
_A History of Control

Figure 17

Table Bay became a replenishing post for the European trading companies during the seventeenth century and was founded as the Cape Settlement by the Dutch East India Company in 1652 (hereafter referred to as the VOC) (Wilkinson, 2000:195). The VOC saw the half-way station as a strategic vantage point in maintaining control of the major sea routes to the East Indies and constructed various fortifications to defend their control of Cape Peninsula from other European powers and the increasingly hostile indigenous inhabitants of the area (Seemann, 1997:17). The extensive maritime fortifications of Table Bay resulted in the fear of an attack from the eastern edge of the Settlement, below Devil's Peak and resulted in the erection of the French Lines from Fort Knokke up the slopes of Devil's Peak (Seemann, 1997:42). The French Lines were constructed between 1781-1782 by the Pondicherry Regiment with the assistance of the garrison, the burghers and their slaves, as a line of defence against land attack from the Cape Flats and False Bay (Seemann, 1997:42). The French Lines were made up of the Hollands Redoubt, the Centre Redoubt and the Burgher Redoubt which were connected by a series of zig-zag masonry walls, earthen breastworks and ditches (Seemann, 1997:20). The redoubts were either triangular or quadratic in shape and consisted of an earth rampart and a dry ditch in the centre connected to a stone walled entrance way on the periphery (Seemann, 1997:42). The French Lines formed the eastern boundary of the town for many years and today the area remains the boundary between the suburbs of Woodstock and Zonnebloem.

Figure 17: Map illustrating the Fortifications at Table Bay in 1815 (Seemann, 1997:62).

Figure 18: The French Lines in relation to Trafalgar Park (Seemann, 1997:47).



The deterioration of the defence lines as the VOC lost control of the Cape during the period between 1784-1795, illustrates the loss of order as the British took control of the Settlement in 1795 (Seemann, 1997:48-54). In the establishment of their authority, the British set about repairing and strengthening the numerous dilapidated defences of Table Bay (Seemann, 1997:54). The shoulder of Devil's Peak was considered a critical point of defence and led to the French Lines being repaired and additional defences being built above the Burgher Redoubt (Seemann, 1997:58). These included the York Redoubt, York Battery (later the Queen's Blockhouse), the King's Blockhouse and the Prince of Wale's Redoubt which would later be replaced by a block house (Seemann, 1997:58).

In 1801 the Cape was returned to the Batavian Republic (Netherlands) after the Peace Treaty of Amiens (Seemann, 1997:58). The Dutch saw the eastern lines of defence as unnecessary and they were allowed to deteriorate once more (Seemann, 1997:58). In fear that their sea routes to the East would be threatened and jeopardise their interests in India, the British regained control of the Cape in 1805 (Seemann, 1997:66). The second British occupation began with the lines of defence in disrepair and by 1829 many fortifications had become obsolete and were either demolished to make room for development or left to deteriorate as the growth of the Settlement expanded southwards (Wilkinson, 2000:196). The following section will look at the history and current state of Trafalgar Park and its surrounding context as the chosen site for the dissertation project.

Figure 19: A timeline illustrating the development of the focal area between the Harbour and Devil's Peak, including the French Line fortifications and Trafalgar Park (Chief Directorate of Surveys and South African Archives).

TRAFALGAR PARK

_At the Edge

Figure 20: Site analysis illustrating the various zones that make up Trafalgar Park.

The realisation that it is the parks in the City of Cape Town which hold the potential for alternative activities which Solà-Morales allocates to the terrain vague of the city in a dense urban environment like Barcelona, together with the remnants of the historical French Lines which once maintained the boundary between the order of the settlement and the chaos of the wilderness beyond, led to Trafalgar Park becoming the focal area for the dissertation. Trafalgar Park has been considerably fragmented by infrastructural developments and boundary walls and fences since its establishment. The piecemeal nature of the Park has reduced the usable and allocated park area to a third of the Parks original size, while the remaining parts make up the Heritage area, Swimming Pool Precinct, a parking area, a couple of informal sports fields and inaccessible islands surrounded by roads. The various edge conditions have rendered large portions of the Park unusable, such as the wasteland along the Penny Pintcher's building. It is areas like these that hold the potential to be reintegrated into the usable area of the Park in a manner which promotes activity and as a result improves security and the potential removal of divisive boundaries.

BACKGROUND

Trafalgar Park is located in the suburb of Woodstock on the eastern edge of the City centre and Zonnebloem, stretching from Victoria Road to Walmer Estate above the Nelson Mandela Boulevard on the lower slopes of Devil's Peak. Woodstock developed when a number of farms in the area were subdivided in the late 1800's as industrialisation increased, along with a rapidly growing working class. The area around the French Lines remained undeveloped as the Settlement spread southwards, beyond the historical boundary. The neglected land surrounding the deteriorating French Lines was converted into Trafalgar Park for the residents of District Six in 1905 and once again restored to a state of order (Van Heerden, 2015: 4). The rise of crime within the area towards the end of the 1990's, led to an unravelling of control within the suburb. Trafalgar Park degenerated into a host for illicit activity, vagrancy and the vandalism of historical artefacts. In an effort to improve the conditions and regain control, the Park was enclosed by a variety of fences and walls. The various boundary conditions and controlled access times have led to a fragmented and underutilised Park.

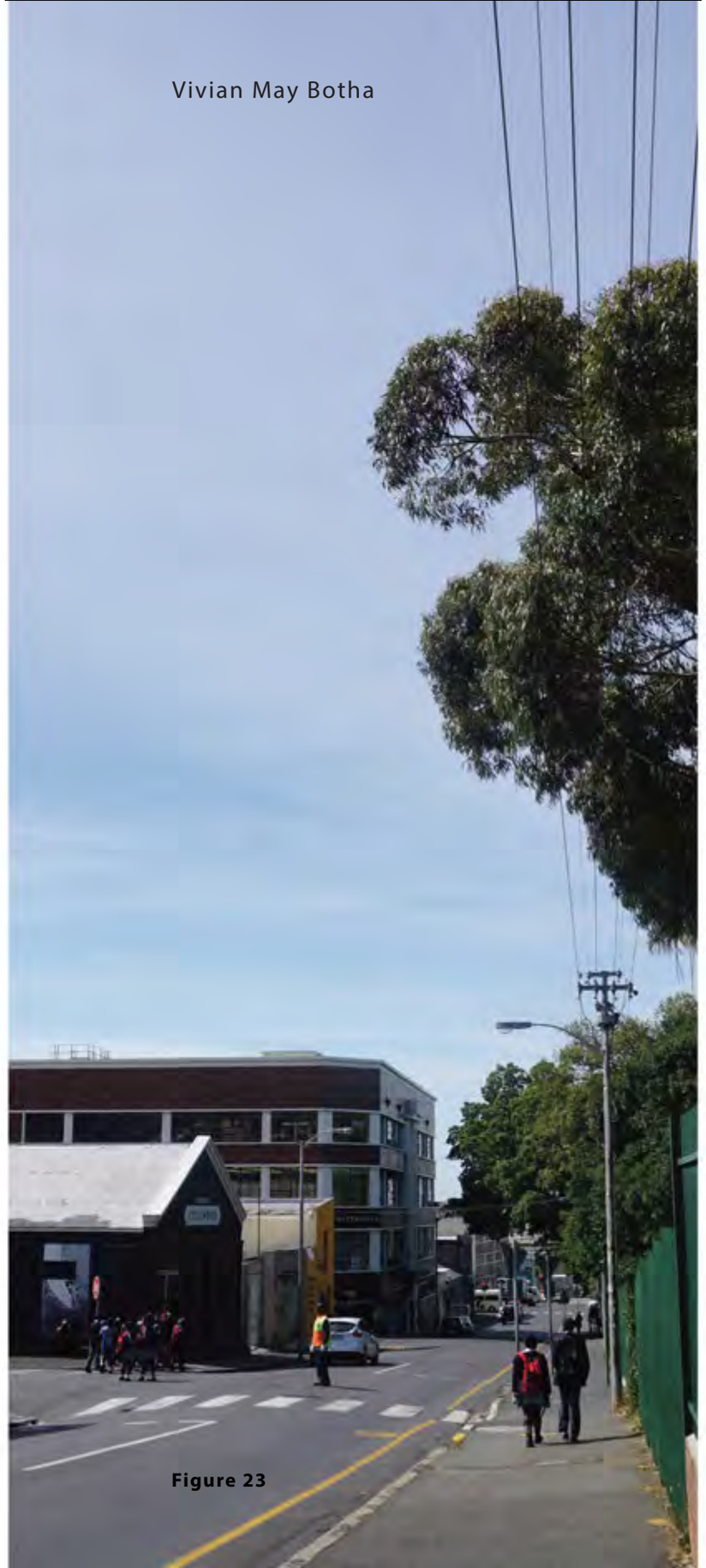
Woodstock is currently experiencing a period of urban redevelopment as young professionals are buying up the old and affordable Victorian houses and developers seize the opportunity to renovate former factory buildings. The steady gentrification of Woodstock has led to a diverse number of people inhabiting and working in the area. The variety of activities ranging from commercial, industrial and residential components generates a fluctuating flow of people to the neighbourhood, which vary significantly from hours in the day, to days of the week. Week days see a vast influx of people from all spheres of society, while evenings and weekends quieten along the bustling main roads and liven up considerably within the residential streets, with many locals occupying their stoeps and corner shops. The Park has the capacity to become a major asset for the Woodstock area, as it holds the potential for recreational activities which Solà-Morales allocates to the terrain vague in dense urban environments.

Figure 21: A diagram illustrating the broader urban context in relation to Trafalgar Park.

Figure 22: Site Analysis highlighting a number of aspects influencing the Park.

Figure 23: Photograph of Searle Street.

Figure 24: Site Analysis illustrating the various layers that contribute to and affect the Park.



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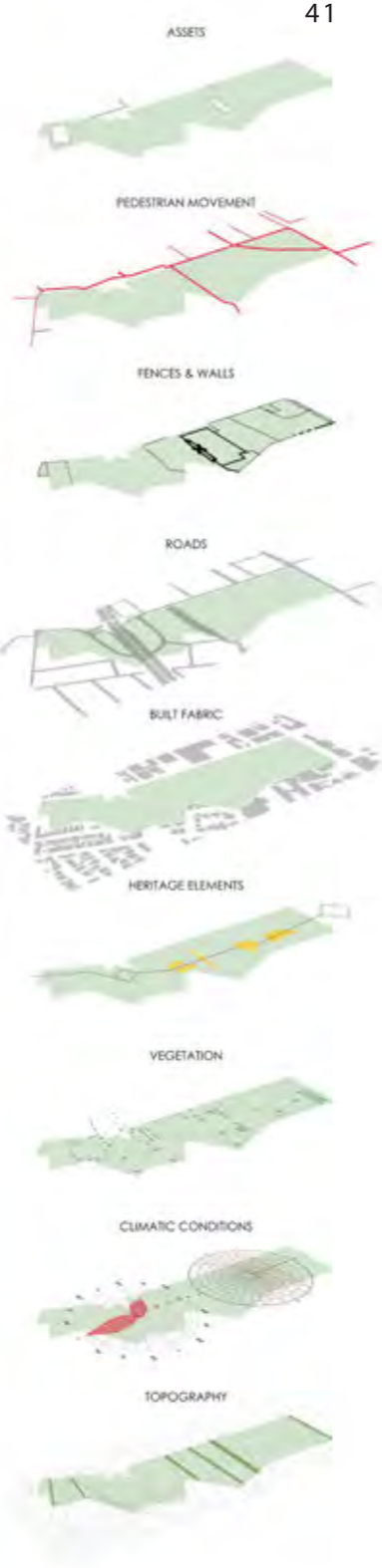

Figure 24


Figure 25


Figure 26


Figure 27


Figure 28


Figure 29


Figure 30


Figure 31


Figure 32


Figure 33

EDGE CONDITIONS

Trafalgar Park is bordered by Victoria Road to the North, Searle Street to the West, high office buildings to the East and is fragmented by the Nelson Mandela Boulevard to the South. The Park is surrounded by various business parks, commercial buildings, residential zones, numerous schools and civic facilities. Many people commute to the area via bus, mini bus taxi or train, with the prominent transport routes running along Victoria Road and the Woodstock train station located off Albert Road to the North of the Park. The sidewalks along Searle Street are used as the dominant route for people walking to their offices and schools to the South of Victoria Road, while the main path through the Park is a popular route, when open. The entire northern edge of the Park along Victoria Road has been fenced off by palisade fencing with only two entrances and controlled access times. The western edge of the Park from Victoria Road up to the boundary wall of the Swimming Pool Precinct has also been fenced off, again with only two public entrances and controlled access times. The north western corner is occupied by the City Parks Depot and Offices which have been fenced off from the Park for security purposes. The lower eastern edge of the Park slopes down towards a barrier of high rise buildings which block light, access and visibility, making it an uncomfortable space for park goers. The southern end of the Park is significantly disconnected from the rest of the Park due to Swimming Pool Precinct and the extensive road network of the Nelson Mandela Boulevard and connecting off ramps. The two informal sports fields, on either side of the highway, are used by local soccer teams, despite the large boulders which were bizarrely placed in the centre of the fields by City Parks to discourage activity. The Park is considerably fragmented by the Swimming Pool Precinct which is bordered by high walls and its entrance building, with the car park located on its southern side below the informal sport field. The Swimming Pool Precinct's northern boundary severs the connection between the pool area and the rest of the Park with a 2.3m wall on a 4m high embankment.

Left: Photographs of a number of boundary conditions found on Trafalgar Park.

Figure 25: The fence between the established Park and the Heritage Area.
Figure 26: The Swimming Pool Precinct's boundary wall along Searle Street.
Figure 27: Two fences separating the Park Depot area from the Park.
Figure 28: The fence at the informal sports fields with the large rocks.
Figure 29:The fence along the eastern boundary of the Park and the Tollgate building parking lot.
Figure 30: Fence at Victoria Road.
Figure 31: The fence between the wasteland and the Heritage Area.
Figure 32: The high boundary wall between the Swimming Pool Precinct and the Heritage Area.
Figure 33: Fence at the upper sports field.

Figure 34

Figure 35

Figure 36

Figure 37

Figure 38

Figure 39

Figure 40

Figure 41

Figure 42

The large Swimming Pool Precinct is utilised by many people, specifically school children, during the summer months from October to April and then not at all for the rest of the year when it closes for the Winter. The eastern edge of the Swimming Pool Precinct is an underutilised area which has been fenced off and left as wasteland and is bordered by the back of the Penny Pincher's building.

HISTORICAL RESOURCES

The Woodstock Swimming Pool entrance building is a pre-1927 art deco design by Frederick Martinus Bongers (artefacts.co.za). The central part of the building reflects some valuable features of the art deco style while aesthetically the changing room wings carry little historical significance. The only built remnant of the French Lines is the Central Redoubt, located in the centre of Trafalgar Park on the northern side of the Swimming Pool Precinct, below the high embankment. This central area contains a number of heritage assets including the Central Redoubt, a conical kiln and a paper incinerator and has been fenced off from the rest of the Park to prevent vandalism to these significant structures. The conical kiln is thought to have been built by the British in 1830 and little is known about the paper incinerator along the western boundary but it was indicated on a 1907 survey diagram as a 'paper burner' (CoCT, 2015: 13). The Park Depot office is a Cape Dutch revival building built before 1940 and is considered to have heritage value (CoCT, 2015: 14). The pre-1923 art deco Chalets/ toilet facility on the north western corner of the Park has been badly vandalised making it structurally unsound, resulting in there being no bathroom facilities for the Park (CoCT, 2015: 13). There are many trees on the Park which consist mainly of tall eucalyptus, date palms, large ficus trees and a number of smaller newly planted trees along the main path from Victoria Road to Searle Street. The avenue of ficus trees in the centre of the Park have heritage significance as they mark the line of the historical breastworks that connected the Holland Redoubt to the Centre Redoubt. The Park was initially known as the Eastern Plantation and a small avenue of Pine trees remain above the Swimming Pool Precinct indicating the line of the breastworks connecting the Centre Redoubt to the Burgher Redoubt.

Left: Photographs of the various Heritage Resources located on Trafalgar Park.

Figure 34: Central Redoubt with brick kiln.

Figure 35: Stone wall.

Figure 36: Unknown heritage building.

Figure 37: Ficus tree avenue.

Figure 38: Paper Incinerator.

Figure 39: Park Depot Building.

Figure 40: Art-Deco swimming pool entrance building.

Figure 41: Pine tree avenue.

Figure 42: Art-Deco Chalet.

Figure 43

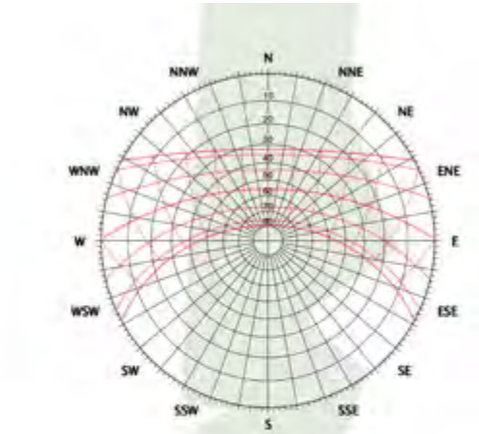

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Figure 45

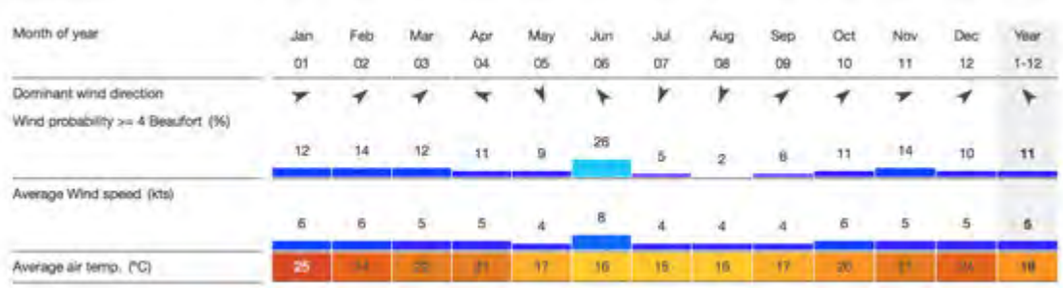


Figure 46

ENVIRONMENTAL CONDITIONS

Understanding the relationships between temperatures, humidity, precipitation and the direction of prevailing winds are essential for informing building placement, layout and determining the appropriate passive design strategies in response to the specific site conditions. The undeveloped slopes above Woodstock form part of the Table Mountain Nature Reserve and best illustrate the conditions that once occurred on the lower slopes, where Trafalgar Park is located. The area is exposed to harsh sun, strong winds and frequent fires, resulting in the growth of low Peninsula Shale Fynbos and a small portion of endangered Peninsula Shale Renosterveld (Fact Sheet, 2011). The fertile clay soils derived from the Malmesbury Shales are often shallow and easily degraded, resulting in poor water retention and erosion evident in areas of the Park (Fact Sheet, 2011). The unique geographical characteristics of the Table Mountain together with the cold Benguela current of the Atlantic Ocean generate unique climatic conditions around the Cape Peninsula. The temperate climate results in dry warm summers with strong prevailing winds from the south/south east and mild wet winters with rain bearing winds from the north/north west.

Figure 43: Sketch illustrating position of Trafalgar Park in relation to geographic and climatic conditions.

Figure 44: Sunpath Diagram for Cape Town at 34 degrees South (www.jaloxa.eu).

Figure 45: Prevailing Wind Direction from the Cape Town International Airport Weather Station (www.windfinder.com).

Figure 46: Climatic Data for Cape Town from the Cape Town International Airport Weather Station (www.windfinder.com).

ENVIRONMENTAL RESPONSE

While the dominant focus for the design project is the interrogation of the various edge conditions of the Park, I believe that an environmental responsive approach to design should be inherent in architecture. A growing concern for resource depletion, climate change and water scarcity has generated a heightened awareness of humanity's effect on the environment and has led to a trend in everything 'green' and 'eco-friendly'. The increasing aspiration towards being environmentally conscious has elevated sustainable architecture into a desired approach to design. Sustainable architecture is an ambiguous term as understandings of it range from a back to nature approach and aesthetic, to advanced technologies that enable a business as usual to building operations but with the benefit of lower energy consumption. The spread of 'greenwashing' and, as Howard Liddell aptly calls it, 'eco-bling' has become prevalent in 'green' buildings, resulting in a stylistic approach to sustainable architecture rather than an operationally effective and contextually appropriated approach to good design (Liddell, 2014). Essentially, sustainable design strategies should be inherent in the architectural process, as Susan Maxman suggests, "sustainable architecture isn't a prescription. It's an approach, an attitude. It shouldn't really even have a label. It should just be architecture" (Maxman, 1993). The lighting, heating and cooling of buildings mechanically requires large quantities of energy and consequently cause detrimental harm to the environment (Lechner,2001: 9). Architecture should aim to lower the energy demand of a buildings through passive means before the implementation of alternative and renewable energy technologies (Liddell, 2013: 6). This can be achieved through the implementation of a number of simple passive design strategies which use the physics of buildings to response to the physical and climatic conditions of a site by working integrally with nature. An intricate knowledge of the climatic and physical characteristics of a site is essential for an environmentally responsive approach to design. The fundamentals principles for passive design deal with heating through an understanding of the sun's geometry, cooling through ventilation and shading and the use of indirect day lighting as well as educated occupant involvement.

Figure 47: A photograph of the pine trees located on the informal sports fields which have grown at an angle as a result of the powerful South Easter Winds that blow over Devil's Peak.

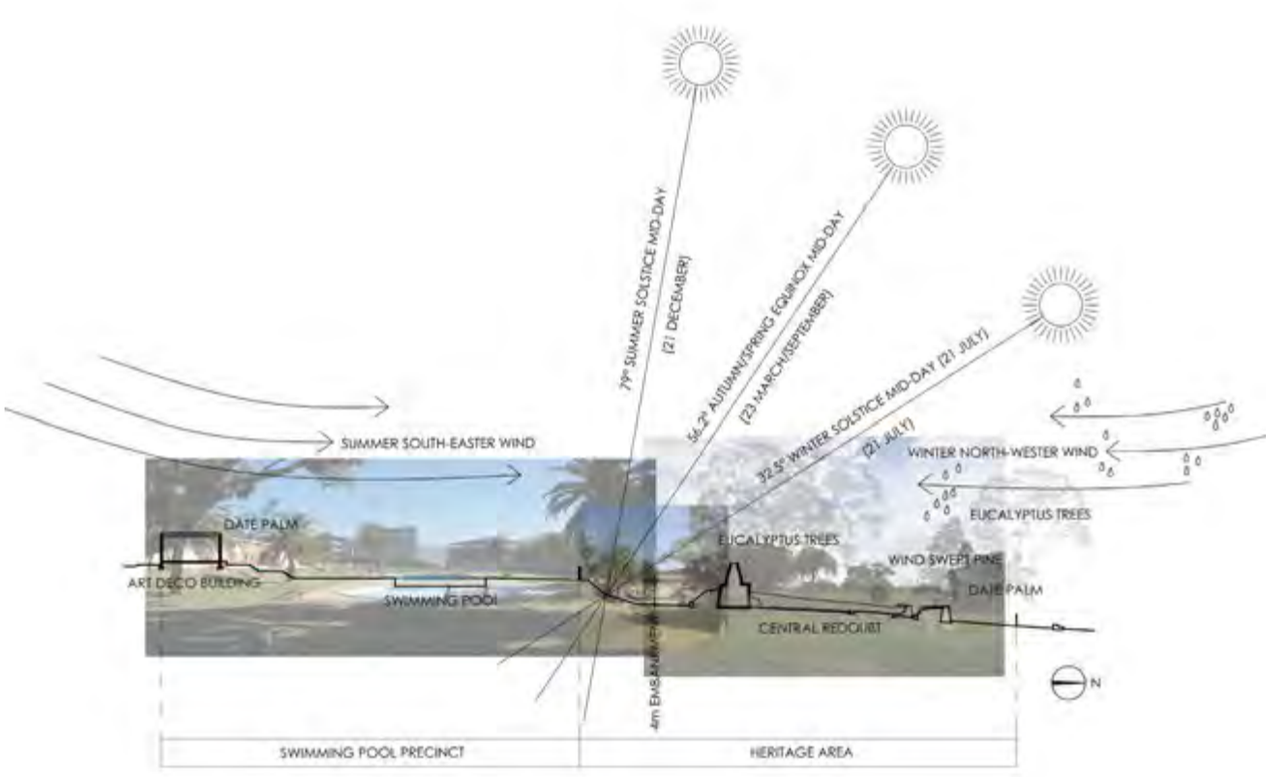
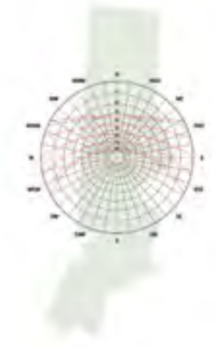
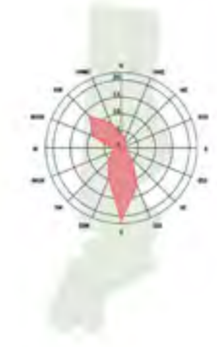
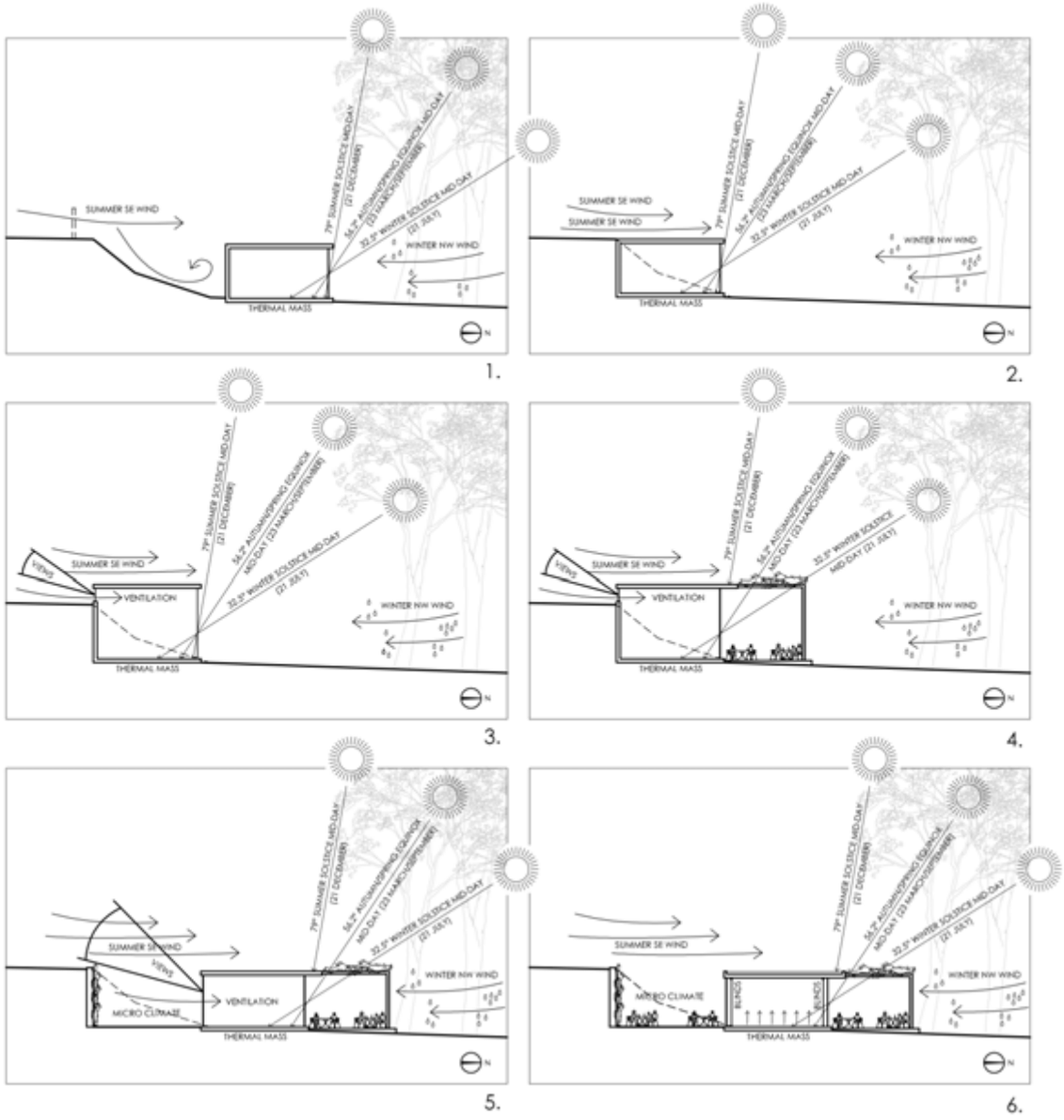


Figure 48: Diagram illustrating the climatic conditions of the site, specifically looking at the bank between the Swimming Pool Precinct and the Hertiage Area.

The ideal orientation for a building in a temperate climatic zone in the Southern Hemisphere would be to positon the longer length in an east west direction (van Lengen, 2008: 41). This ensures that a smaller wall surface area is exposed to the morning and afternoon sun during longer summer days, keeping the building cool. The east west embankment on the boundary of the Swimming Pool Precinct offers an ideal location for additional facilities, providing some protection from the prevailing South-Easter winds and spectacular views of Devil's Peak and Table Mountain. The proximity to the various heritage structures and trees offers an opportunity to engage with these elements and give them value within the Park. Larger windows should be placed on the northern side with smaller windows on the south, this allows maximum sunlight and warmth to enter on the northern façade during the colder winter months when the sun angle is lower. The small southern windows prevent large amounts of heat radiating out of the building during the winter months but allow for light and cross ventilation, if larger winds are desired internal shading devices can be utilised to prevent heat loss. The desired east-west orientation results in the longer sides of the building being exposed to the prevailing summer South-Easter winds and winter North-Wester winds with its directional rain. The use of embankments, trees and other buildings on the windward sides of the building forces prevailing winds to pass over the building (van Lengen, 2008: 274). The southern side of the building can be protected from the harsh South-Easter winds by partly embedding it in into embankment located along the boundary of the Swimming Pool Precinct. The use of the hill protects the building from the strong south eastern winds while allowing for natural light and ventilation. The northern side of the building can be partially protected from the winter North-Wester wind by the cluster of Eucalyptus trees and to some extent the fort.







One of the fundamental aims of environmental design in a temperate climate is the retention of heat. This is achieved through effective orientation as well as thermal mass and insulation (van Lengen, 2008: 272). The floors should be made from materials such stone or ceramic tiles, which are able to absorb heat entering the building during the day and radiate the stored heat at night when outside temperatures drop (van Lengen, 2008: 272). The ceilings should be well insulated to prevent the escape of heat during the winter, while higher ceilings ensure a comfortable internal environment during the summer (van Lengen, 2008: 273). In order to keep the interior cool during the summer, sunlight needs to be prevented from entering the building to avoid solar heat gain (Heath, 2009:168). On the east and western sides of the building this can be achieved through the use of vertical shading devices which prevent the high summer sun from entering the building. The extension of eaves or living awnings on the northern side of the building keeps the interior of the building cool while providing outdoor shade. The advantage of placing over hangs on the northern façade, enables the winter sunlight to enter the building and heat the thermal mass of the floors. Large glazing offers the opportunity for light and heat to enter the building during the winter months while shading would be required during the summer months to prevent glare and excess heat. The planting of deciduous vegetation on trellises inhibits harsh sunlight from entering during the summer months, while providing a cool micro climate around the building (van Lengen, 2008: 272). In the winter, when the leaves fall, sunlight is able to enter the space and when necessary the use of internal shading devices allow occupants to control glare and heat loss.

Figure 49: Environmental response design exploration for the east-west building at the embankment between the Swimming Pool Precinct and the Heritage Area.

1. The ideal east west orientation exposes the building to the prevailing winds.
2. Embedding the building into the embankment allows the wind to pass over the building.
3. The addition of windows on the south allow for natural day lighting and ventilation.
4. Living awnings with diciduious vegetation on the north provide protection against the summer sun while allowing in the winter sun for heat gain.
5. A courtyard on the south allows for a micro climate, increased natural ventilation and day lighting.
6. The addition of internal shading to control glare and prevent heat loss and a planted roof for insulation.

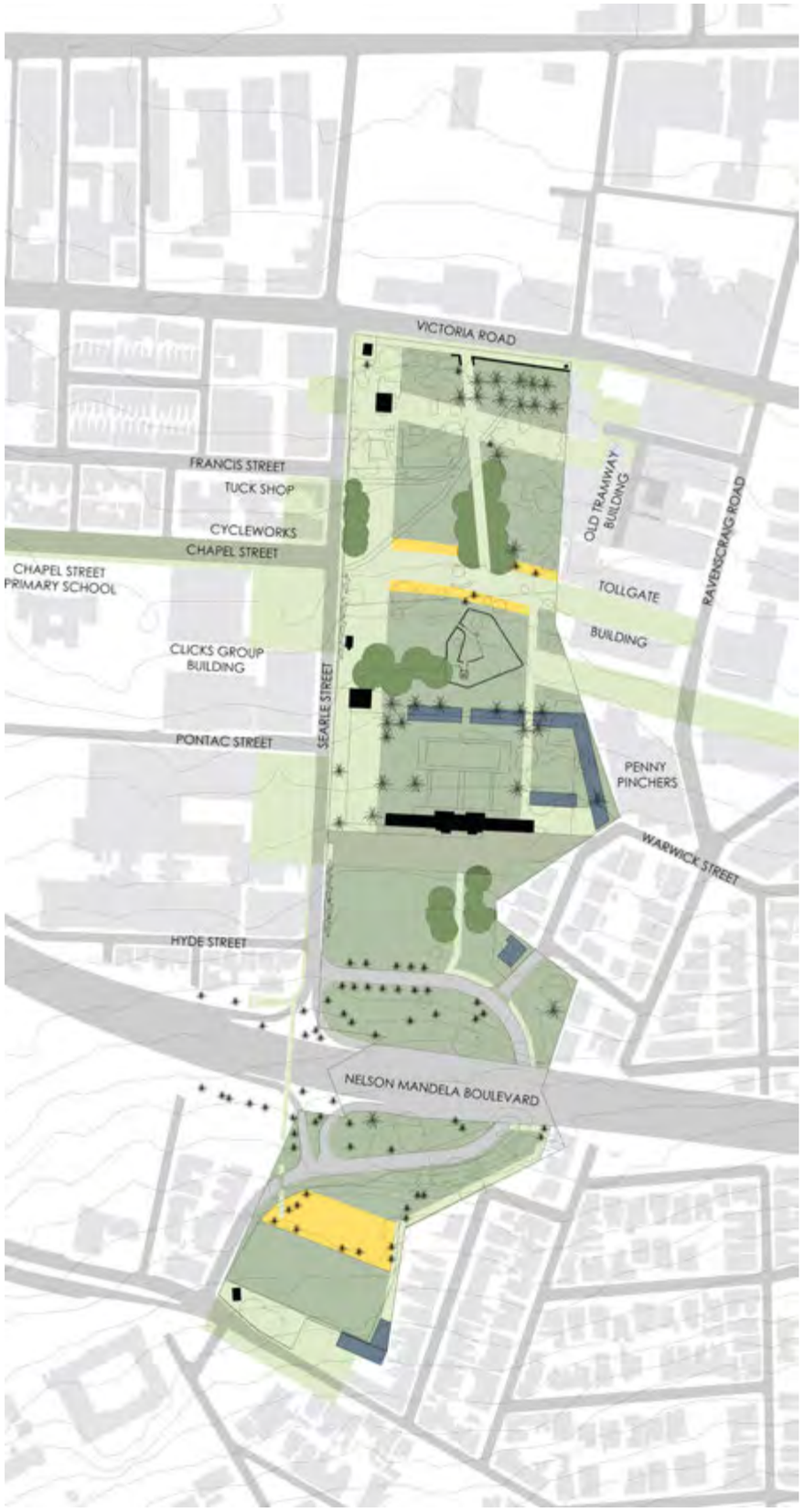
DESIGN RESPONSE

Figure 50: A photograph of Trafalgar Park looking from the Central Redoubt northwards.

On determining what it is that provided terrain vague sites with their unique characteristics, it was clearly evident that it is the unravelling of their edge condition from a state of order to disorder and the return of chaos and ultimately, nature that provide these spaces with a sense of freedom in their emptiness. The overzealous attempt to maintain control of Trafalgar Park through the implementation of various boundary conditions, has resulted in the Park being underutilised and feel unsafe. The design response began with the realisation that the edge conditions of the Park needed to be removed and manipulated where possible to enable accessibility and activity. The redefinition of edges which are created by existing buildings and topography requires an approach which utilizes these conditions for architectural interventions that are able to mediate between different spaces across the Park. The use of the impacted embankment between the Swimming Pool Precinct and the Heritage area for additional facilities responds both to the topographical and climatic conditions of the Park while facilitating accessibility through the Precinct. The increase in activity through routes and auxiliary buildings brings a presence to the Park which facilitates visual observation and added public safety. The project, therefore, aims to re-activate the Park through the manipulation of the various edge conditions, the creation of public space and the celebration of historical elements through an environmentally responsive approach to design that engages with the specificities of the site. The master plan will explore the possibilities of integrating the Park into its surrounding context on a broader scale while the major architectural intervention focuses on how to activate the Swimming Pool Precinct and reconnect it to the Park.

MASTERPLAN

_Design Response



The masterplan explores the manipulation of the various edge conditions in the aim of improving accessibility and celebrating the several historical buildings and trees that are be found across the Park. The removal of the numerous fences and walls along the edges enable access and stronger links between the Park and its surrounding context. The removal of internal barriers at the Park Depot, around the Heritage Area, Swimming Pool Precinct and at the upper sports fields improves the connection between the various disjointed sections of the Park. The various heritage assets form points of interest across the site and will be dealt with in a celebratory manner through the design of appropriate public space or landscape. The following outline examines the proposed masterplan by looking at the different edge conditions and how these have impacted the internal planning of the Park and broader urban context.

Figure 51: Masterplan design strategy.

Figure 52: Pedestrians wait for the bus along Victoria Road on the northern edge of the Park

Figure 53: Searle Street along the western edge of the Park.

Figure 54: The upper sports field on the southern edge of the Park.

Figure 55: The pine tree avenue on the eastern edge of the Park with the informal sports fields in the background.

Figure 52: Northern Edge of Park along Victoria Road

Figure 53: Western Edge of Park

Figure 54: Southern Edge of Park

Figure 55: Eastern Edge of Park

Figure 56: Diagram illustrating the design strategy for the northern edge of the Park.

NORTHERN EDGE

The low stone walls along the northern edge of the Park will be retained to maintain a sense of order between the busy Victoria Road and the Park. The central route through the Park will run along the French Lines and through the avenue of ficus trees to reveal the historical boundary by contrasting its traditional role of defence and control with accessibility and freedom. I propose that a formalised bus stop be placed at the foot of the Park along Victoria road between the two northern entrances of the pedestrian routes. The reintegration of the north western corner of the Park is achieved by relocating the Park Depot and government house to the south of the Park at the Swimming Pool Precinct and residential area above. The demolition of the various out buildings and insignificant additions on the historical Cape Dutch revival building allows for the development of a public space around the historical building while integrating the area back into the Park. I propose that the Cape Dutch revival building be converted into a café which reactivates the north western corner of the Park by drawing people in from the surrounding context. The historical art deco chalet on the corner of Victoria and Searle Street is to be restored and converted into a security facility, replacing the current security trailer.

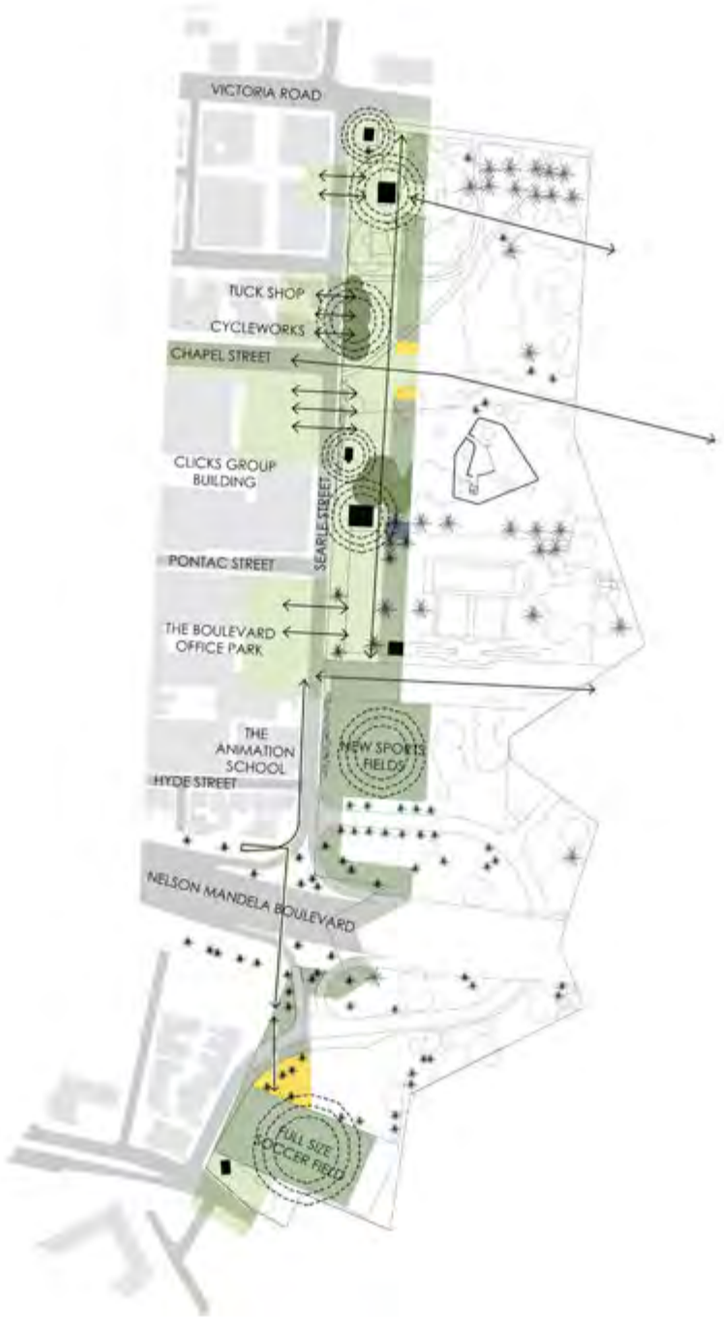


Figure 57: Diagram illustrating the design strategy for the western edge of the Park.

WESTERN EDGE

The main pedestrian route from Victoria Road towards the upper southern end of the Park and surrounding context is located along Searle Street and offers the opportunity to create an active public space along the western edge of the Park. This is achieved by making a wide public route which engages with the Park, various heritage buildings, Searle Street as well as the adjacent and surrounding context. The walkway in set in from the street integrating it into the Park while ensuring pedestrian safety and creating an edge of public space between the pedestrian route and the street. The Cape Dutch revival building is located on the northern end of the western pedestrian route creating an active public space as people walk past or visit the proposed café. In order to slow the traffic along the busy Searle Street, various surface treatments are used to indicate where the public spaces of the Park stretch across to the adjacent buildings and where activities from the surrounding buildings could potentially stretch across to the Park. This strategy is used between Chapel Street and Francis Street with the block housing the Cycleworks bicycle shop and a small tuckshop frequented by the numerous passing school children. The intention is to blur the boundary between the Park and the City by providing a public space for Cycleworks to use under the small line of ficus trees on the edge of the Park to display bicycles and serve clients. This approach is used again to link the Park and the Clicks Group building car park which I propose to redevelop into an open accessible space that can be utilised by the public after hours and on weekends for parking or other activities. The area opposite the Click Group Building along the edge of the Park houses the historical paper incinerator building. I propose to surround the building with a fynbos planted landscape that opens up to reveal the significant structure. As one walks along the path on its northern end the beautiful red iron door is exposed to the passer-byer, while on the south side the tall slim chimney stretches to the sky. To the south of the Paper incinerator building the swimming pool pump house can be found along the pedestrian route and will be explored in the following section on the architectural intervention.

Figure 58: Diagram illustrating the design strategy for the southern edge of the Park.

The pedestrian route continues up towards the informal sports fields where the large stones will be removed to accommodate two smaller soccer fields for school children up to under-tens and can be marked off to allow for adult 5-aside games. The pedestrian walkway crosses Searle Street at this point linking The Boulevard Office Park and The Animation School to the Park as well as shifting the route to the western side of the street below the busy traffic intersection to the south. Shifting the walkway to the western side of Searle street enables a safe route for pedestrians to cross over the highway at the existing bridge. I propose that an additional bridge is built as an extension of the route to connect the northern side of the Park to the upper Sports fields which are difficult to access from the north as a result of the busy roads and off-ramps.

SOUTHERN EDGE

The upper sports field is to be developed into a full size soccer field which can be used by older school children as well as local clubs. The scheme proposes that a changing and ablution facility with space for a tuckshop be built into the southern bank of the field with the remaining bank converted into stepped seating for spectators. The small playground on the south western corner of the Park will be relocated away from the busy intersection to a safer area below the sports field. The south end of the Park above the field will be converted into public space for activities which can double up as parking when required.

EASTERN EDGE

The removal of unnecessary barriers along the eastern edge of the Park would allow for direct access for people working in the various offices and factories along Ravenscraig Road. The north eastern end of the Park is occupied by the newly renovated Old Tramway Depot building which deals with the edge by linking to the Park through a pleasant, though fenced, courtyard that can be opened to the Park. Opening the Tollgate car park to the Park and street improves accessibility from the east and provides additional parking for the Park after hours and on weekends when the car park remains largely unused.

Figure 59: Diagram illustrating the design strategy for the eastern edge of the Park.

The removal of the garages at the Tollgate Industrial Centre would provide the opportunity for a through route from Ravenscraig Road, across the Park to Searle Street and Chapel Street beyond. The current playground is located along the pedestrian route through the Park and offers the opportunity for school children to have a quick swing or slide when walking to and from school while their parents or guardians wait for a few minutes. The numerous schools in the area and the success of the current play area along the pedestrian route resulted in the proposal for a new playground to be placed along the edge of the through route which links the Park to Searle Street and the Chapel Street Primary School beyond. The placement of the playground at this location creates a nucleus of activity between the main routes which radiates to the surrounding spaces of the Park. It is paramount that the design of the play area does not compete with the Central Redoubt but rather reveals it in a celebratory manner. The wasteland on the eastern edge of the Swimming Pool Precinct together with the back of the Penny Pinchers building offers a good opportunity for an architectural intervention which will be discussed later. The residential area around Ravencraig Road is severely disconnected from the northern side of the Park by the Swimming Pool Precinct, the masterplan proposes that this edge is opened to the public to improve the community's access to the Park. The parking area above the Swimming Pool Precinct is to be opened at Warwick Street to improve the connection between the surrounding urban context. The Park Depot storage facilities will be relocated to the bank between the sports fields and the parking lot. The avenue of pine trees on the edge of the smaller sports fields will be celebrated by creating recreational space for spectators and the occupants of the adjacent residential area. The link between the residential area above the Nelson Mandela Boulevard and the eastern edge of the Park will be strengthened through the removal of barriers to improve the access route to the playground, sports field and pedestrian bridge.

DESIGN DEVELOPMENT

_Masterplan

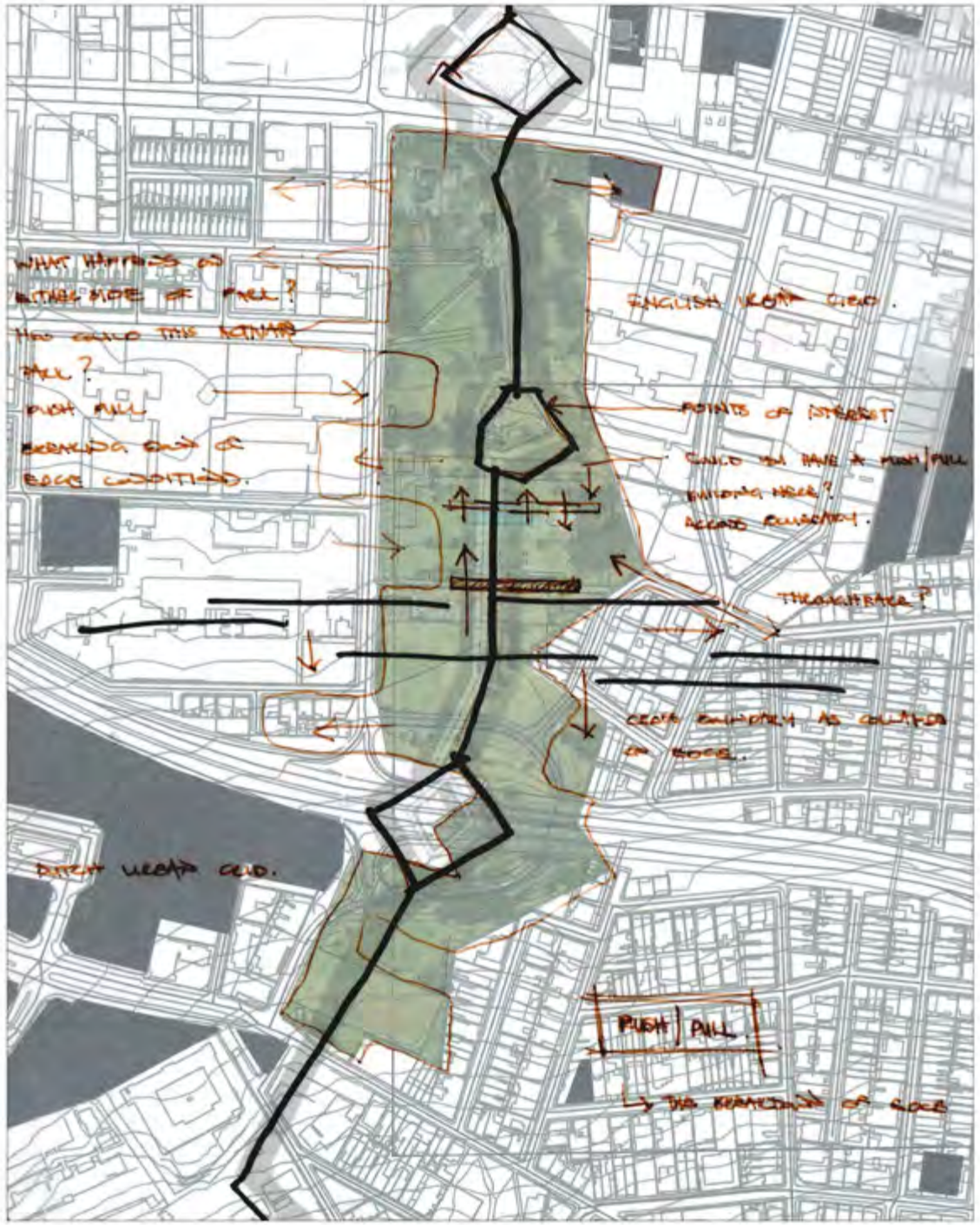


Figure 60

The masterplan developed through the interrogation of the various boundary conditions surrounding and fragmenting the Park. Examining the neighbouring context revealed a number of opportunities where the Park could extend beyond its existing boundaries and create a stronger link with the surrounding urban fabric. The existing pedestrian routes along Searle Street led to the development of a wider route along the western edge which links the north and south of the Park while creating public spaces that engage with both the Park, street and adjacent buildings. The celebration of various heritage assets offer points of interest which creates rich public space and interesting pedestrian routes.

Figure 60: Initial diagram exploring the possibilities of manipulating various edge conditions of the Park.

Figure 61: 1:1000 Site Model exploring the unravelling of the edge condition together with the initial architectural interventions at the Swimming Pool Precinct.

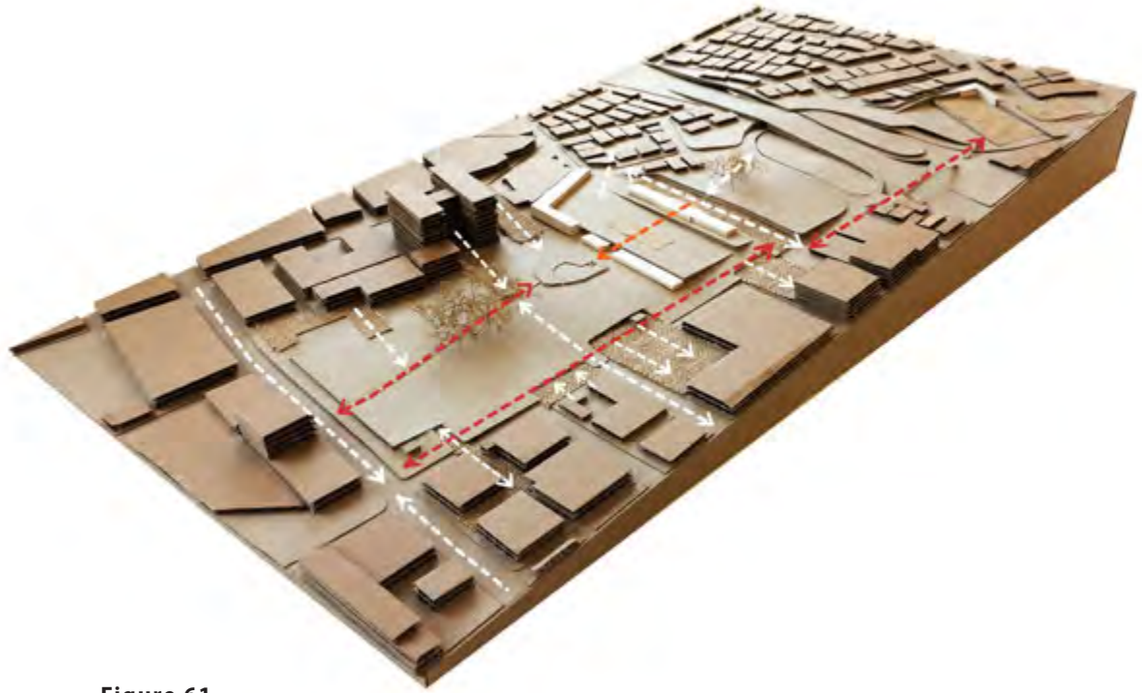


Figure 61

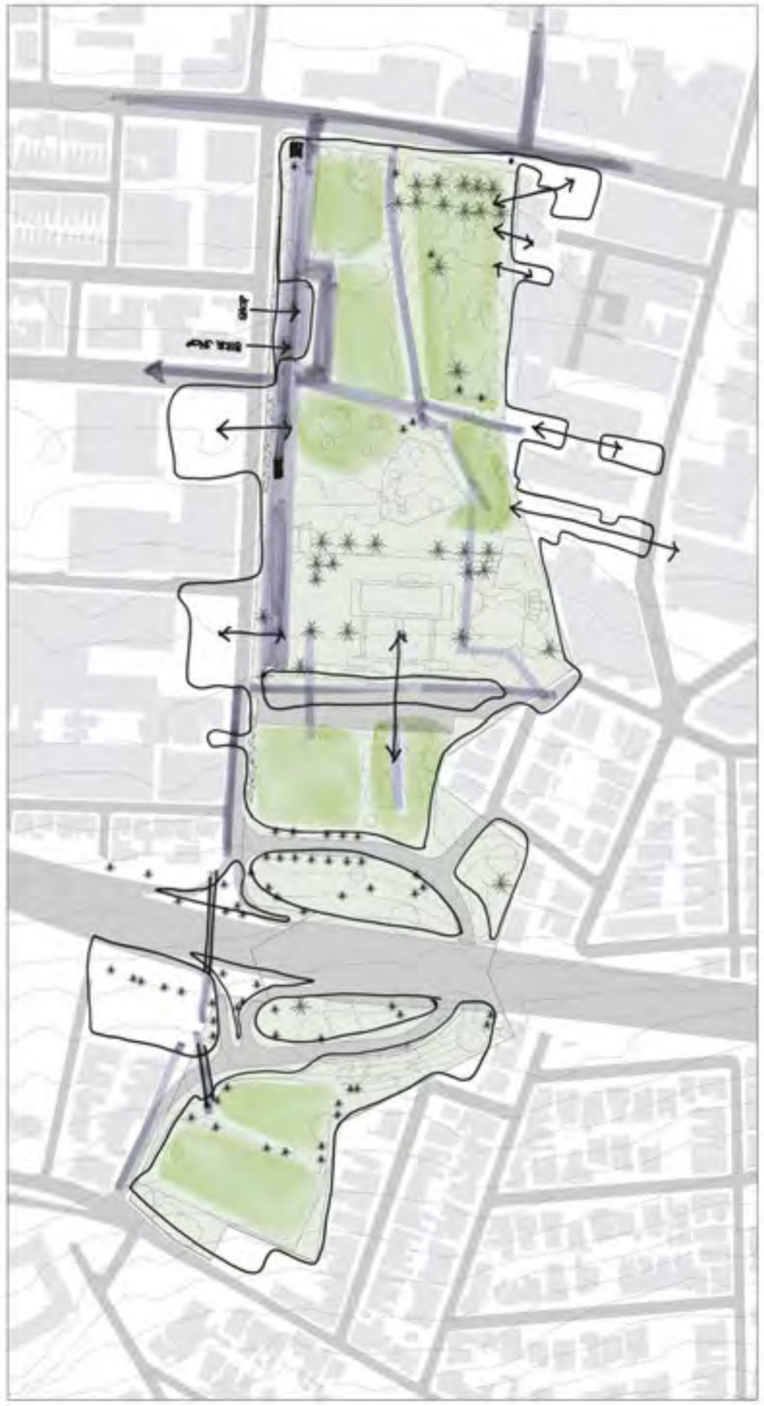


Figure 62

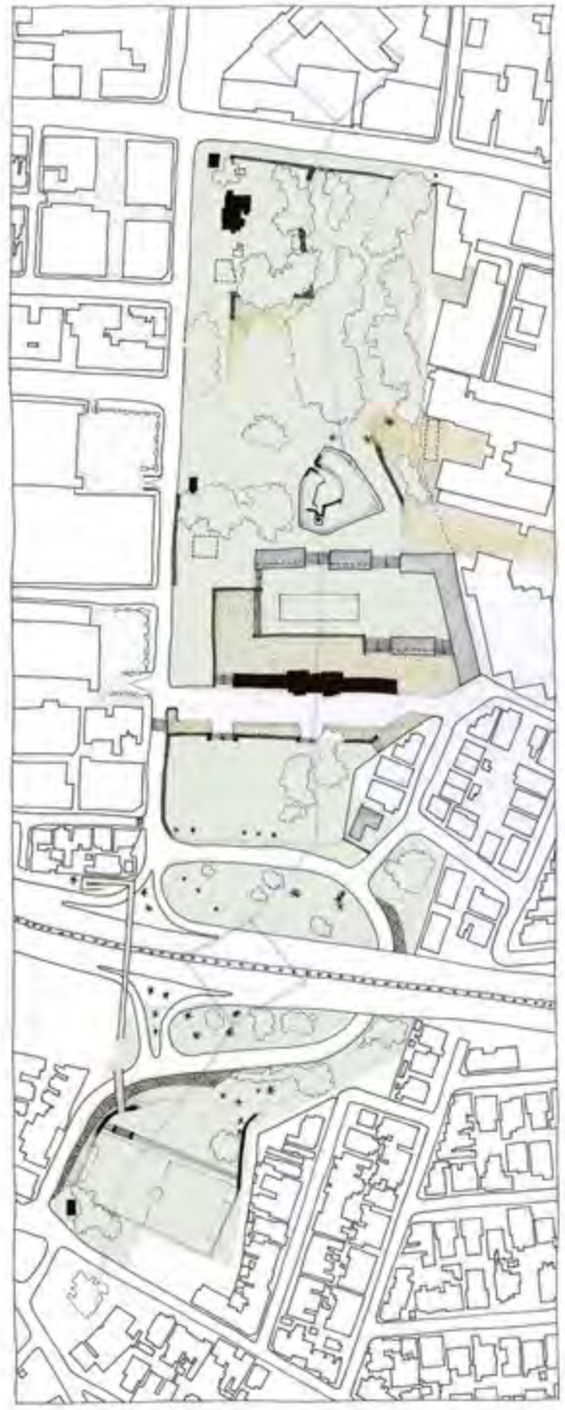


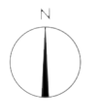
Figure 63

Figure 62: Diagram exploring the possibilities of extending the Park into the surrounding context and increasing accessibility, 10 May 2016.

Figure 63: Initial Masterplan, 22 May 2016

Figure 64: Design development of Masterplan, 26 July 2016.

Figure 65: Design Development of Masterplan, 10 August 2016.



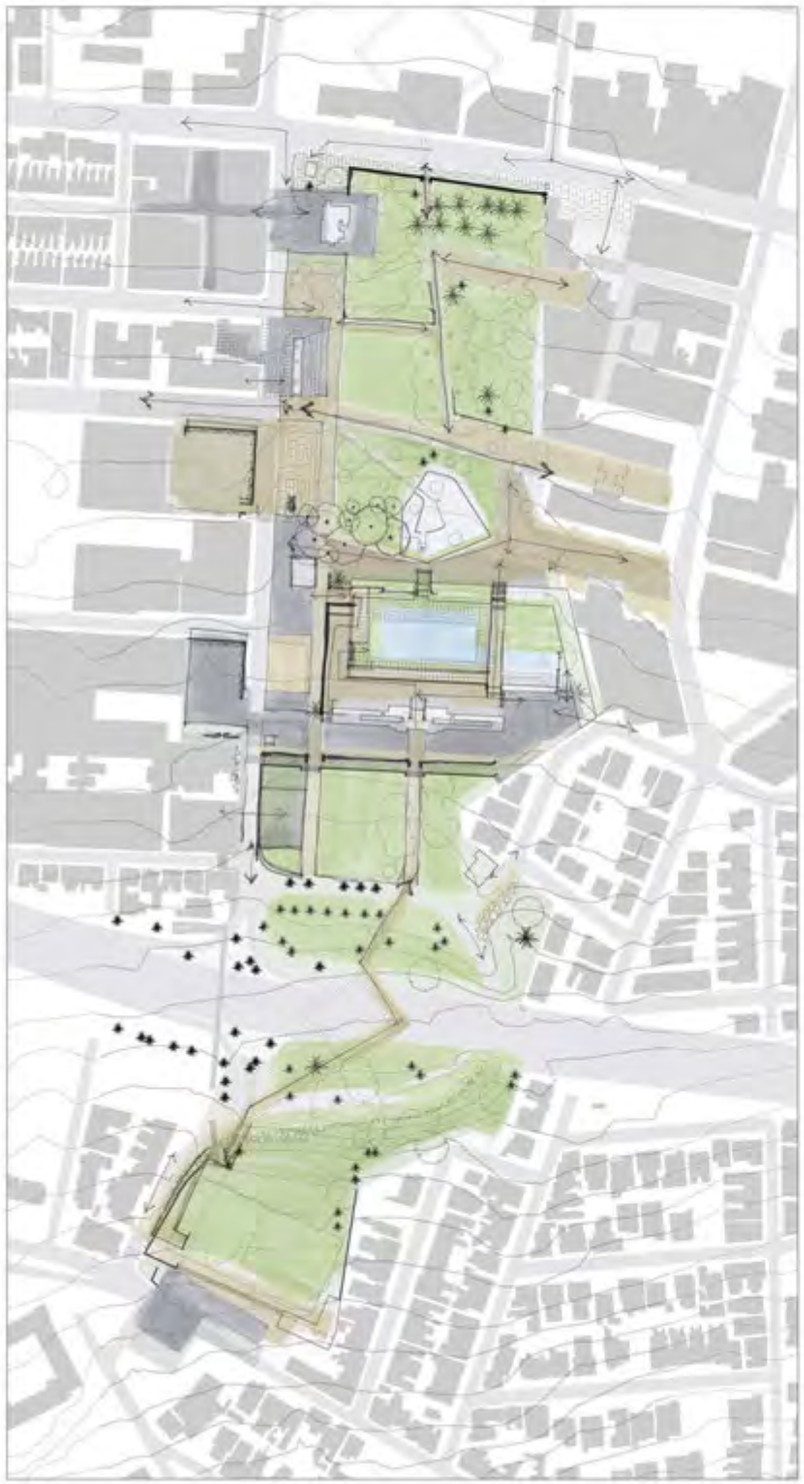


Figure 64

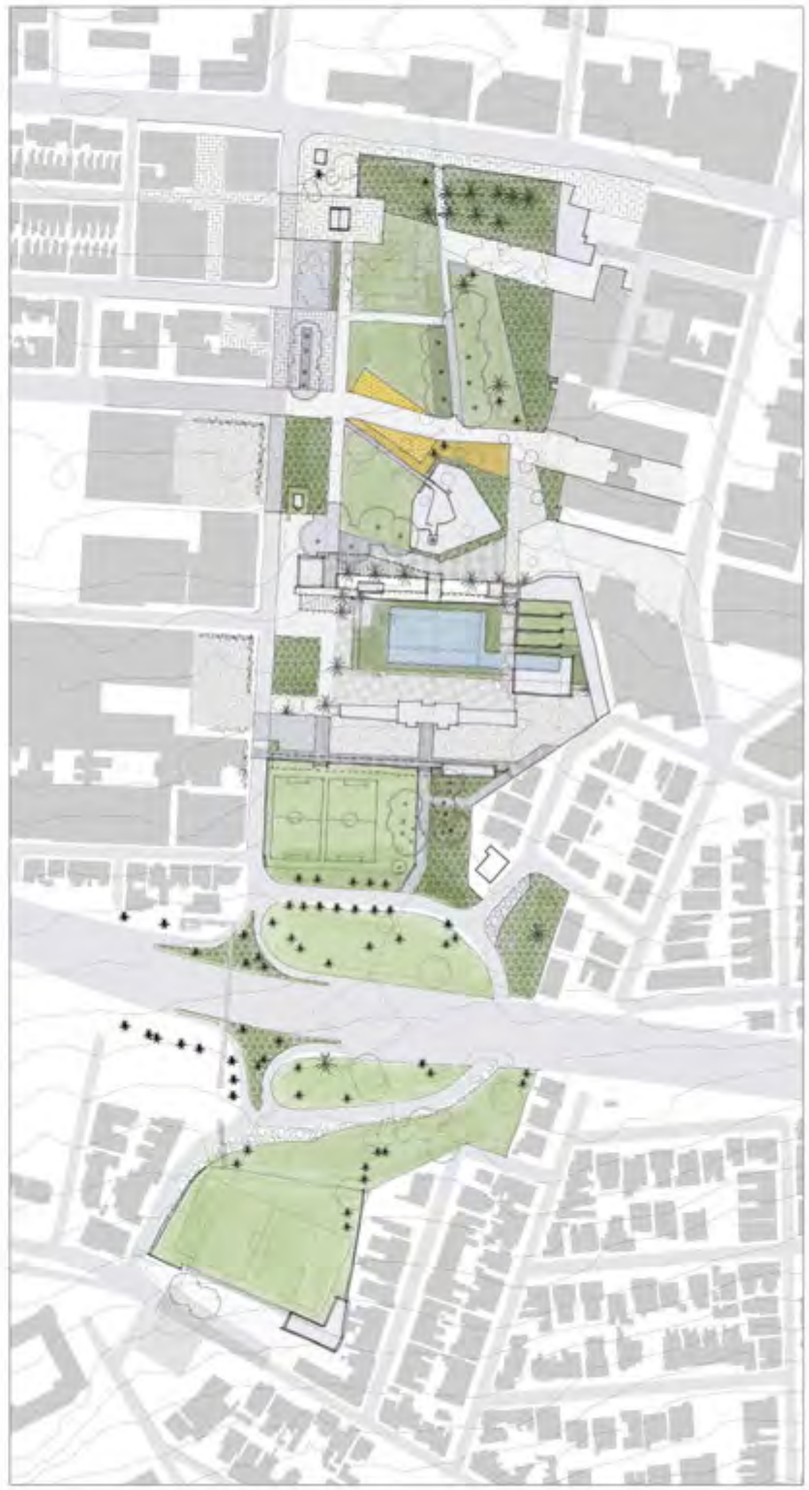
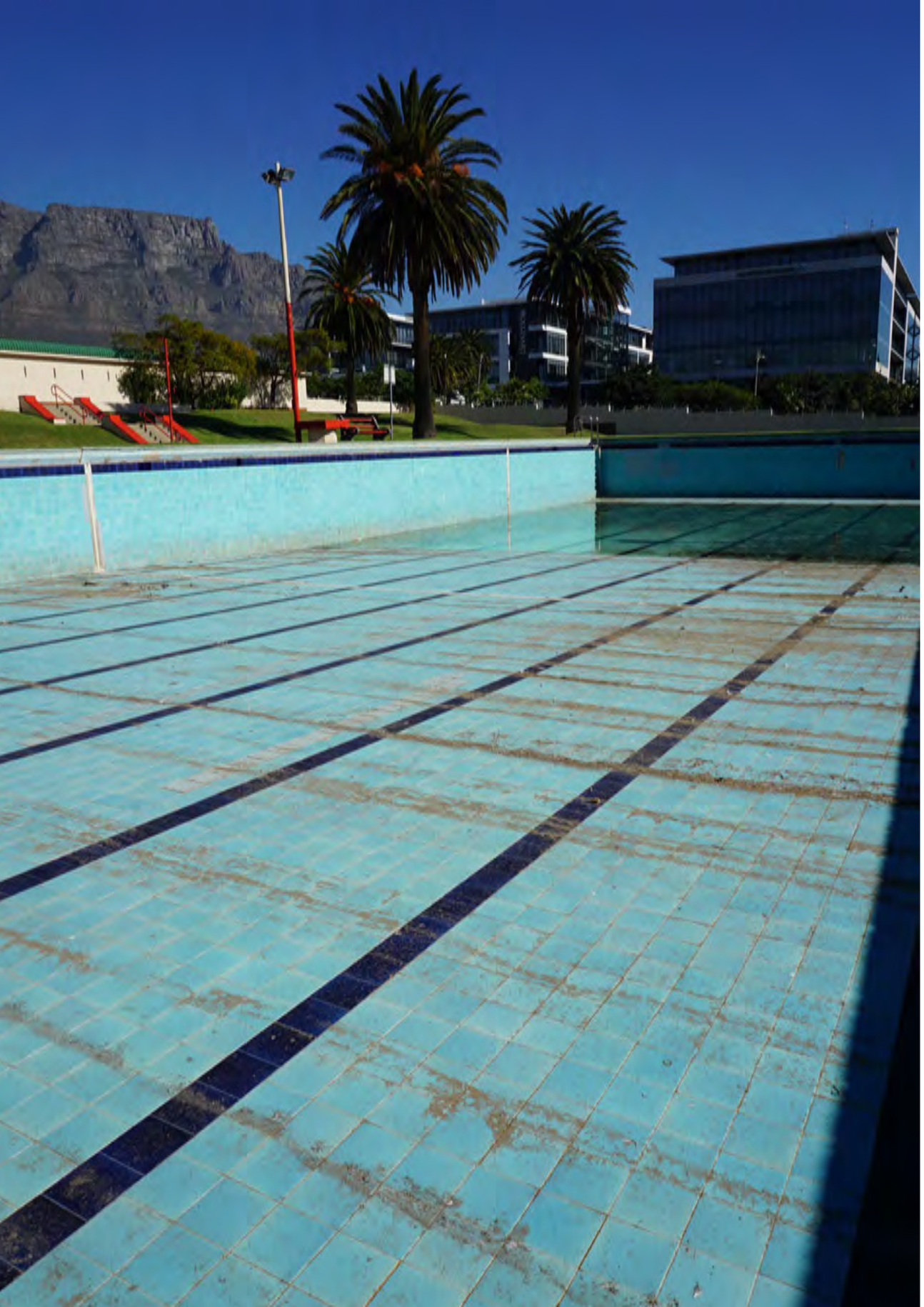


Figure 65

SWIMMING POOL PRECINCT

_Design Response



The analysis of Trafalgar Park pointed to the Swimming Pool Precinct as the appropriate area for an architectural intervention, an underutilised impacted site with aging facilities that require improvement. The Precinct holds the potential for re-linking the north and south of the Park through the upgrading and addition of facilities and the manipulation of edge conditions. The major architectural intervention for the project aims to reintegrate the Swimming Pool Precinct into the Park and increase activity through the addition of appropriate programmes. The approach for integrating the Precinct back into the Park follows similar strategies to the masterplan including the removal of boundary walls, the manipulation of the various edge conditions and the creation of through routes and public space. The Precinct possesses a number of topographic and built edges which have the potential to be redefined by architectural interventions that become mediators between spaces and improve boundary conditions that cannot be completely alleviated. Architecture in its very essence instills order onto the landscape. The design dissertation aims to contrast this inherent condition through the use of natural materials, vegetation and threshold conditions that impart a sense of entropy to the architectural language of the design and represent a return of nature to the Park. The various level changes offer a number of opportunities for the establishment of routes, public space and visual connections across the Precinct that can assist in reintegrating the area into the Park.

Figure 66: A photograph from inside the pool at the Swimming Pool Precinct looking towards Table Mountain.

The existing swimming pool is 48 meters long, two meters short of an Olympic sized pool, I propose to extend the pool by 2 meters as well as deepen it to allow for a diving board and widen it to accommodate a shallower fun pool and children's pool along the edge. The diving platform building which accommodates a tuck-shop/ticket booth and first aid facility at the western end of the pool enables controlled access to the swimming pool area. The embankment between the pool and the entrance building will be redefined into an active edge that accommodates seating for spectators on the upper level and a sheltered area from swimmers below while providing an unobtrusive boundary for the pool area.

The need to extend the swimming season to increase activity at the Precinct led to the addition of a heated indoor pool which would be able to accommodate year round training, learner swimmers, the elderly and physical rehabilitation. The chosen location for the indoor pool lay between the existing Art-Deco entrance building and the eastern edge of the Precinct where it would be easily accessible from the car park. The addition of the indoor pool building would create an additional edge between the car park and the Precinct and would be dealt with by enabling access to the Precinct on either side of the building.

Figure 67: A panoramic photograph of the Swimming Pool Precinct with the Heritage Area in the background.

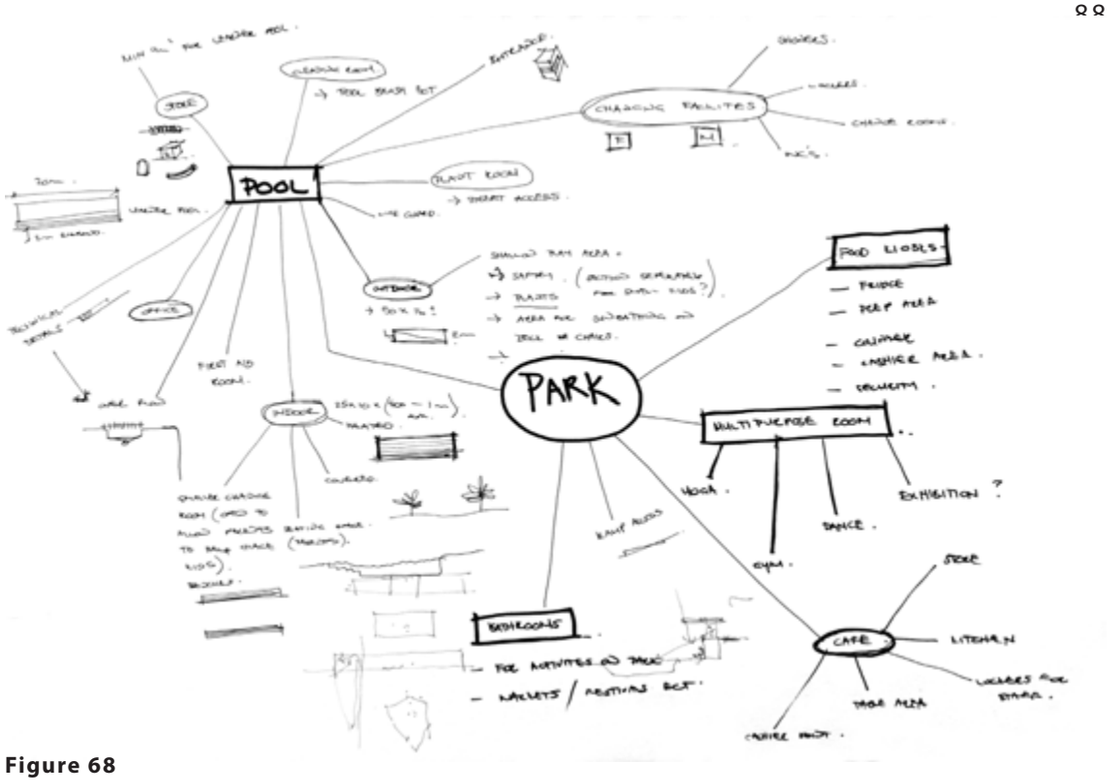


Figure 68

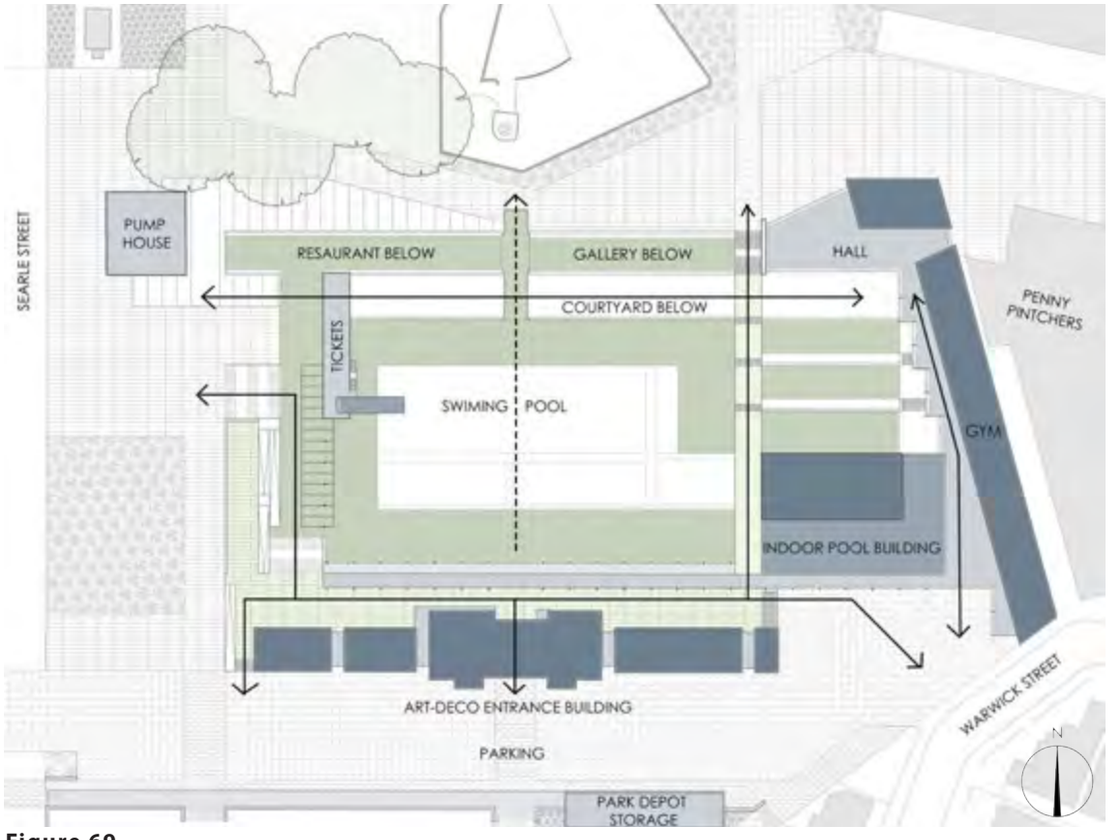


Figure 69

Figure 68: Programme planning.

Figure 69: Diagram illustrating the Swimming Pool Precinct design strategy.

The placement of a long narrow building on the over grown wasteland along the back of the Penny Pincher's building activates the unused eastern edge of the Precinct and encourages a link between the residential area at Warwick Street and the Park. The long narrow building acts as a backbone to the Precinct and requires a highly active programme to increase movement across the site. This led to the long narrow building becoming a fitness gym which is coupled to the indoor swimming pool facility and a multi-purpose hall on its northern end, ensuring activity throughout the day. The multi-purpose hall will accommodate additional gym activities such as dance and yoga classes as well as stage performances for plays and music events which can be watched from the north or south of the building.

The east west embankment between the Precinct and the Heritage area offers the opportunities discussed in the environmental response section above, while simultaneously allowing for the development of an understated building that engages with the boundary condition. The east west building will accommodate the multipurpose hall linked to the gym, a gallery and a restaurant which opens to the Park and Searle Street. The buildings along the embankment redefine the edge of the Precinct in a manner which manipulates the notion of the boundary condition through the use of transparent walls, a courtyard between the buildings and the embankment and the inclusion of thresholds to spaces behind or above. The Pump House on the north western corner of the Precinct will retain its function but will be refurbished to house auxiliary facilities for the restaurant while acting as an edge for the public route along the side of the restaurant. The Precinct's western boundary will be shifted eastwards to accommodate the main pedestrian route along Searle Street as well as public space which can be utilized by patrons of the restaurant for additional outdoor seating. The new western edge will accommodate an elevated public space that can be accessed from both the north and south of the Park and enables occupants to visually engage with both the Swimming Pool Precinct and the public route. The space below the elevated platform will accommodate the restaurant's kitchen and an access route to the courtyard along the embankment.

Figure 70

Figure 71

Figure 72

Figure 73

Figure 74

Figure 75

Figure 76

Figure 77

Figure 78

The central area of the Art-Deco entrance building houses the Precinct's entrance hall, administrative offices and ticket sales booth with large ablution and changing halls accommodated in the wings of the building. The building comprises of small windowed facades, closed doors and extensive security grates diminishing the public presence of the building. This is reinforced when entering the entrance hall which is occupied by large turn styles that are surveyed by a security guard, adding to the sense of restricted access. The changing facilities are in desperate need of an upgrade, despite the recent addition of toilets and a corrugated iron roof with no ceiling or insulation. The redevelopment of the entrance building will accommodate new changing and ablution facilities, offices space for the swimming pool administrative personal, a ticket sales booth for the pool, a coffee/juice shop and the new location for the Park Depot offices. The entrance hall will be refitted with large glass doors and windows to encourage accessibility and create a strong visual link between the north and south of the building. Puncturing large windows into the wings of the entrance building aims to create visual links through the strong wall like building while highlighting the central area that houses the public threshold through the facility.

Left: Photographs of the Swimming Pool Precinct.

Figure 70: The front facade of the entrance building.
Figure 71: The pool side of the entrance building.
Figure 72: The entrance foyer of the entrance building.
Figure 73: The line of sight towards the Central Redoubt.
Figure 74: The Pump House.
Figure 75: Wasteland next to the Penny Pincher's building.
Figure 76: Looking towards Searle Street from the top eastern corner of the Precinct.
Figure 77: The view from the managers office with a view of the conical kiln in the distance.
Figure 78: The changing facilities located in the wing of the entrance building.

DESIGN DEVELOPMENT

_Swimming Pool Precinct

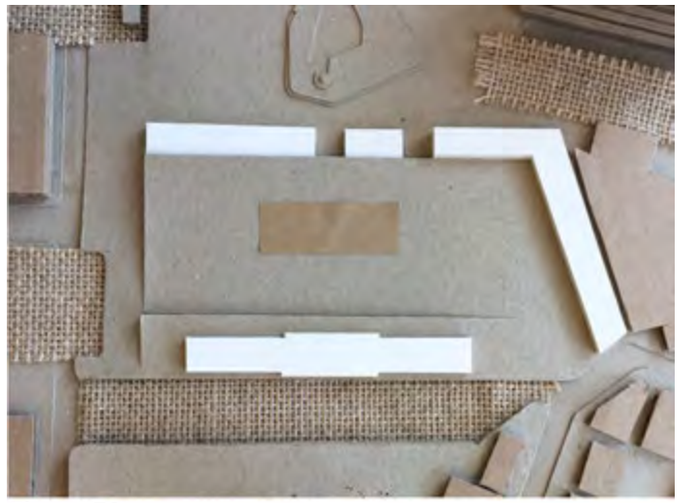


Figure 79

Figure 80

Figure 81

The architectural intervention developed through the interrogation of the various edge conditions of the Swimming Pool Precinct while accommodating routes and visual connections which establish links between the north and south of the Park. The development of public routes while providing controlled access to the swimming pool area to ensure safety was one of the determining factors of the design. The programmes incorporated into the design looked at increasing activity in the Precinct to aid in the re-activation of Trafalgar Park. The architectural language of the development remains understated where possible to avoid competition with the primary purpose of the larger space as a park.

Figure 79: Design development model, May 2016.

Figure 80: Design development model, July 2016.

Figure 81: Design development model, August 2016.

Figure 82: Design development model of Swimming Pool Precinct, August 2016.

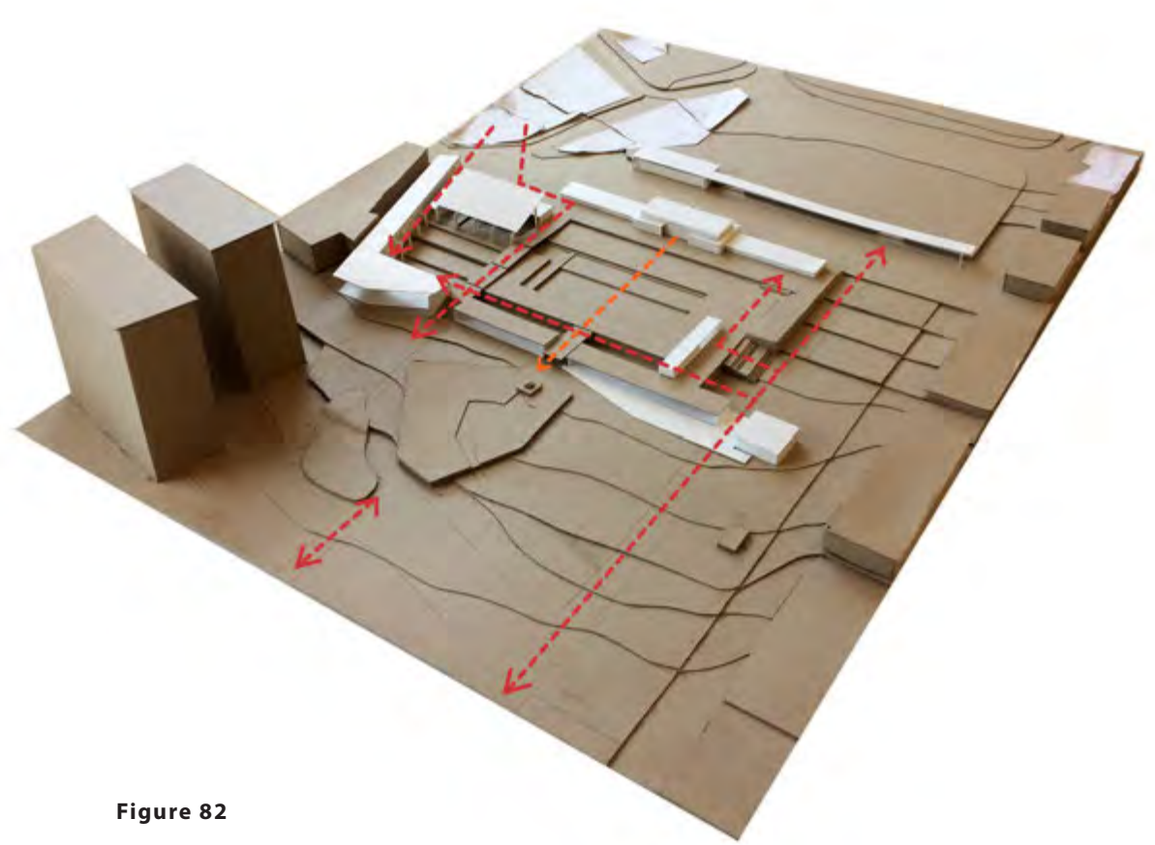


Figure 82

Figure 83

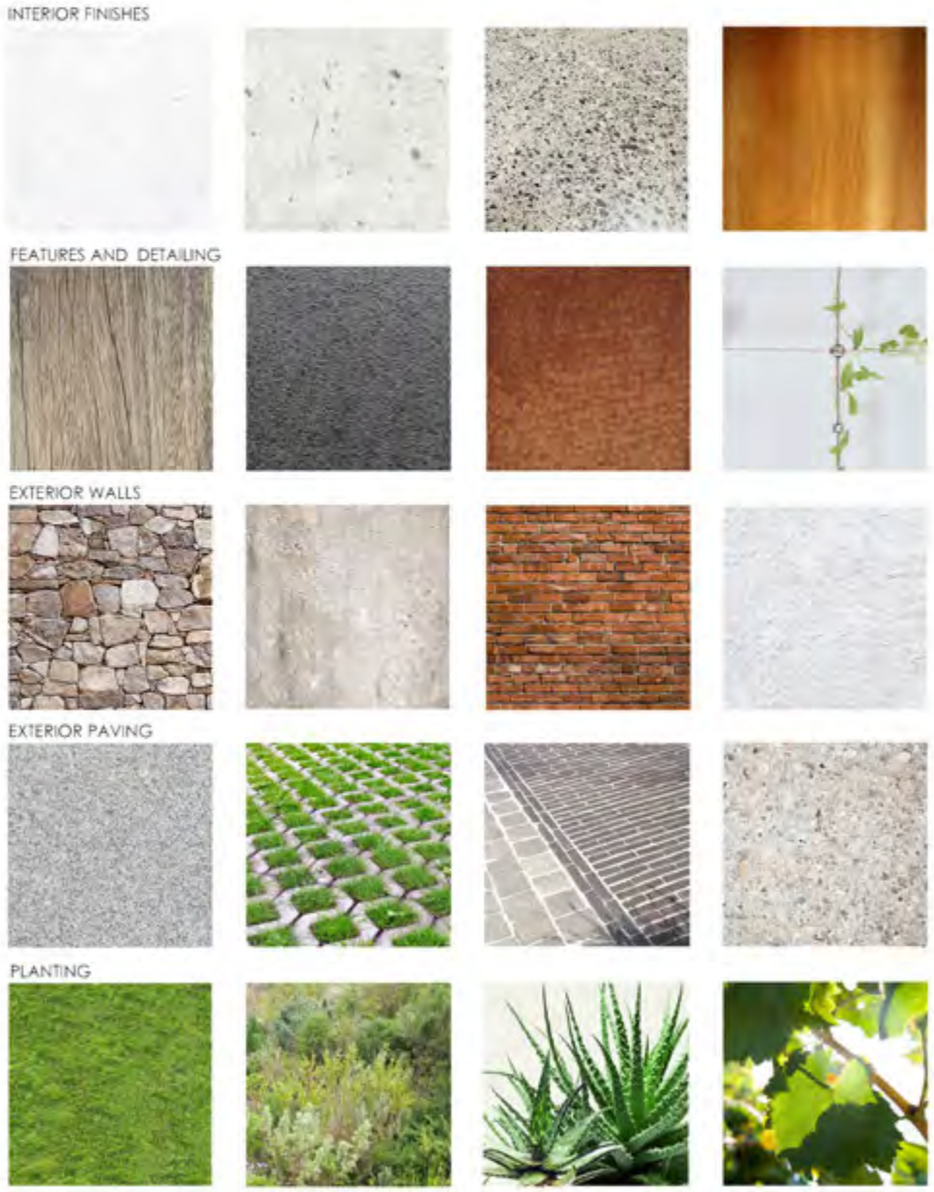


Figure 84

EN LOGE

The technical and material study En Loge focused on a threshold condition between the Swimming Pool Precinct and the Park. The collage looks at the architectural intervention along the embankment between the Precinct and the Heritage Area and begins to explore the manner in which the design interrogates this topographical edge. The staircase leads to the upper bridge on the eastern side of the swimming pool area, acting as a public route connecting the north and south of the Park. The building on the left of the staircase looks at the idea of transparency with a courtyard beyond as a play on the edge condition.

Figure 83: Technical En Loge, July 2016.

Figure 84: Material study En Loge, July 2016.

Figure 85: Development Sketches for the En Loge.

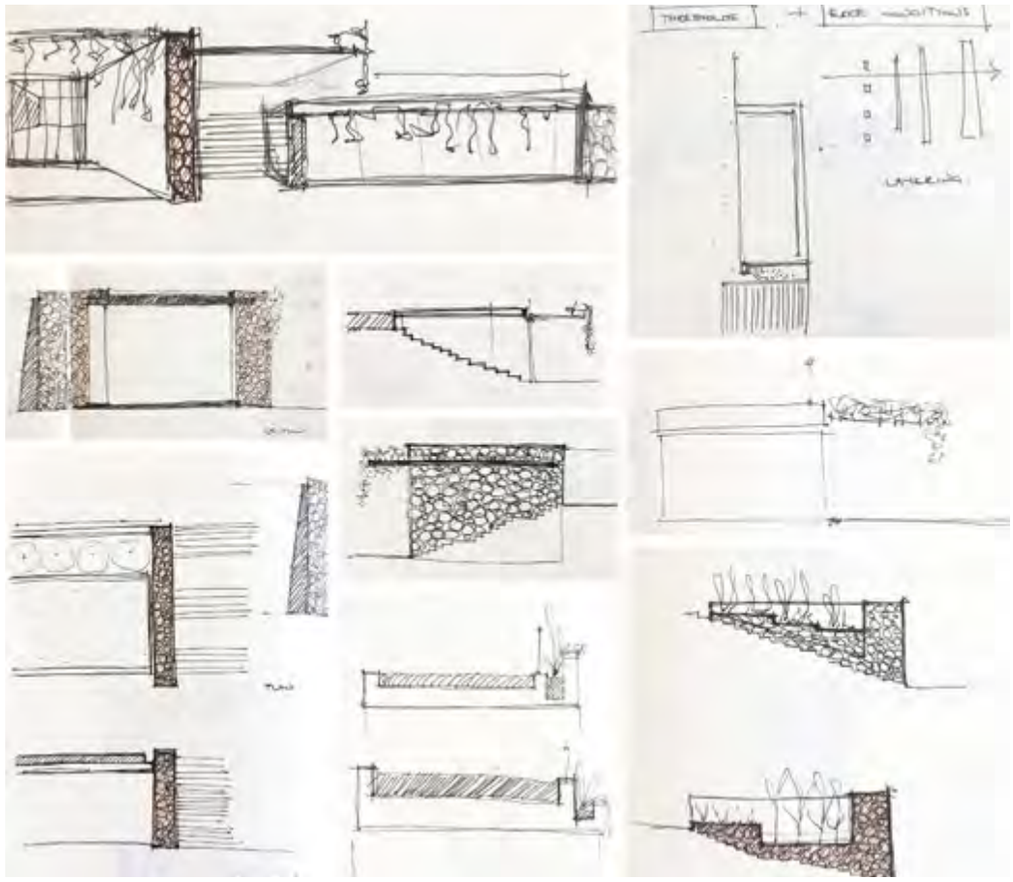


Figure 85

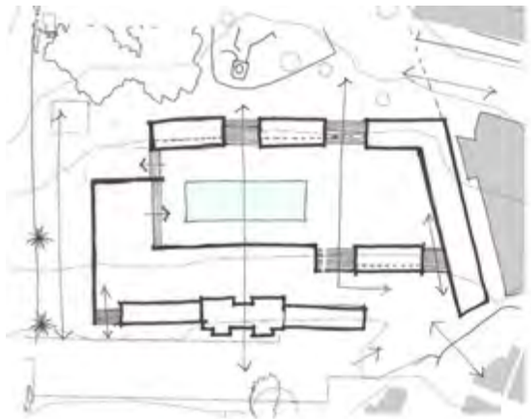


Figure 86

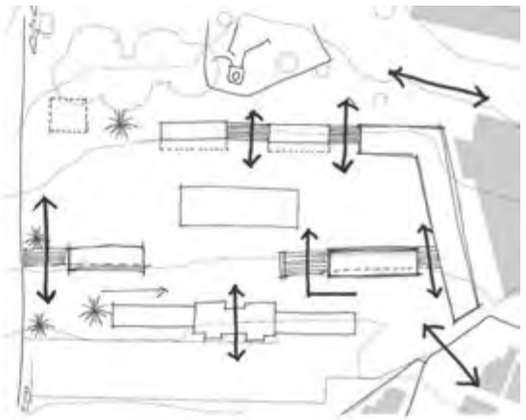


Figure 87

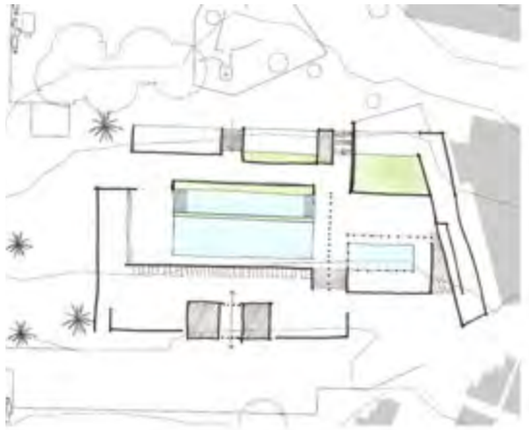


Figure 88

Figure 89

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Figure 92

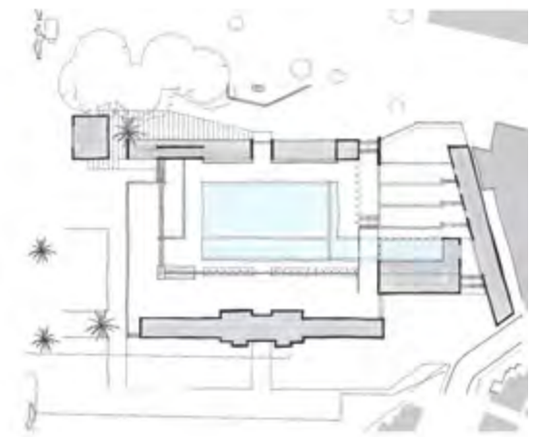


Figure 93

Figure 94

Figure 95

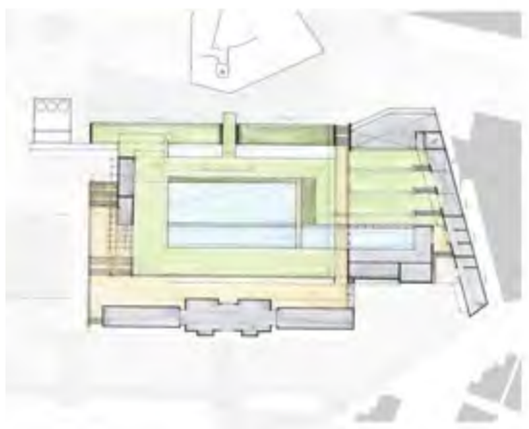


Figure 96

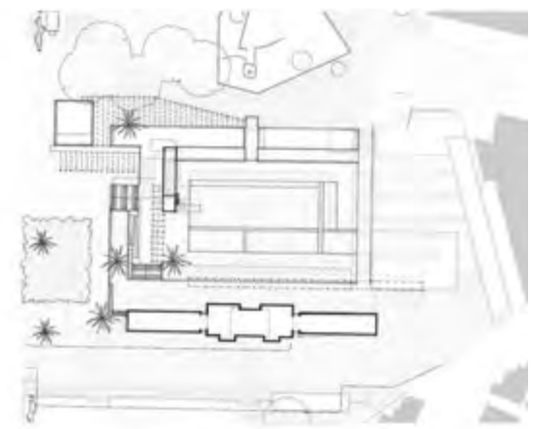
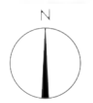


Figure 97



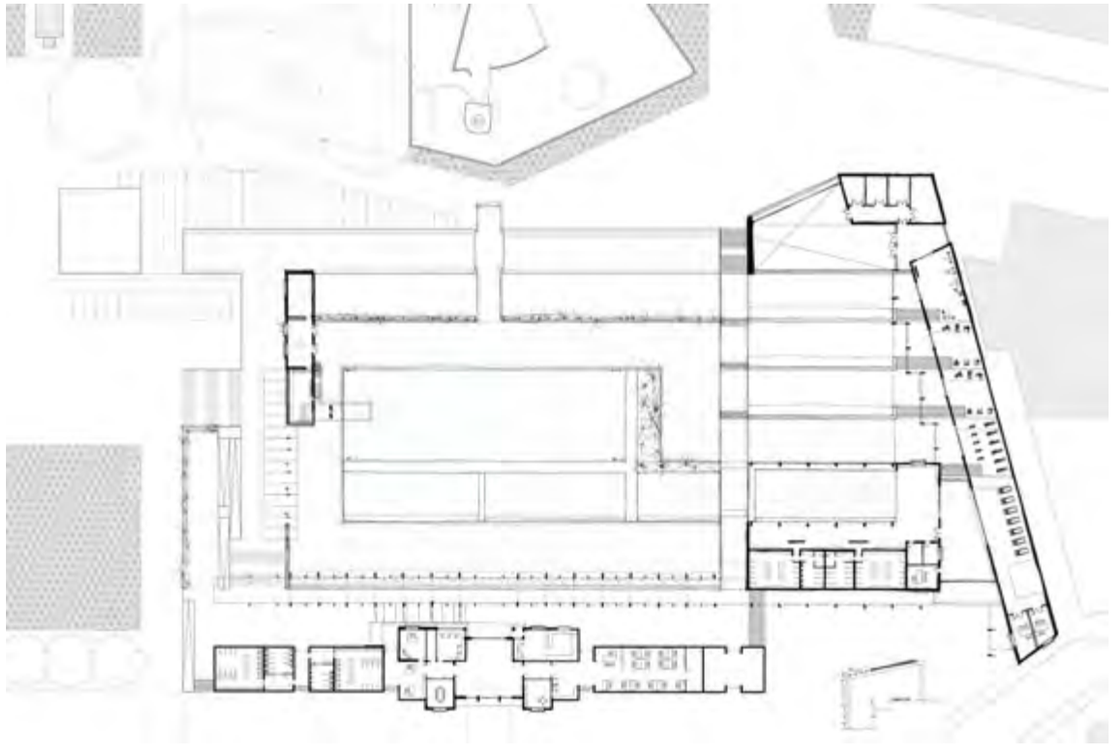


Figure 98

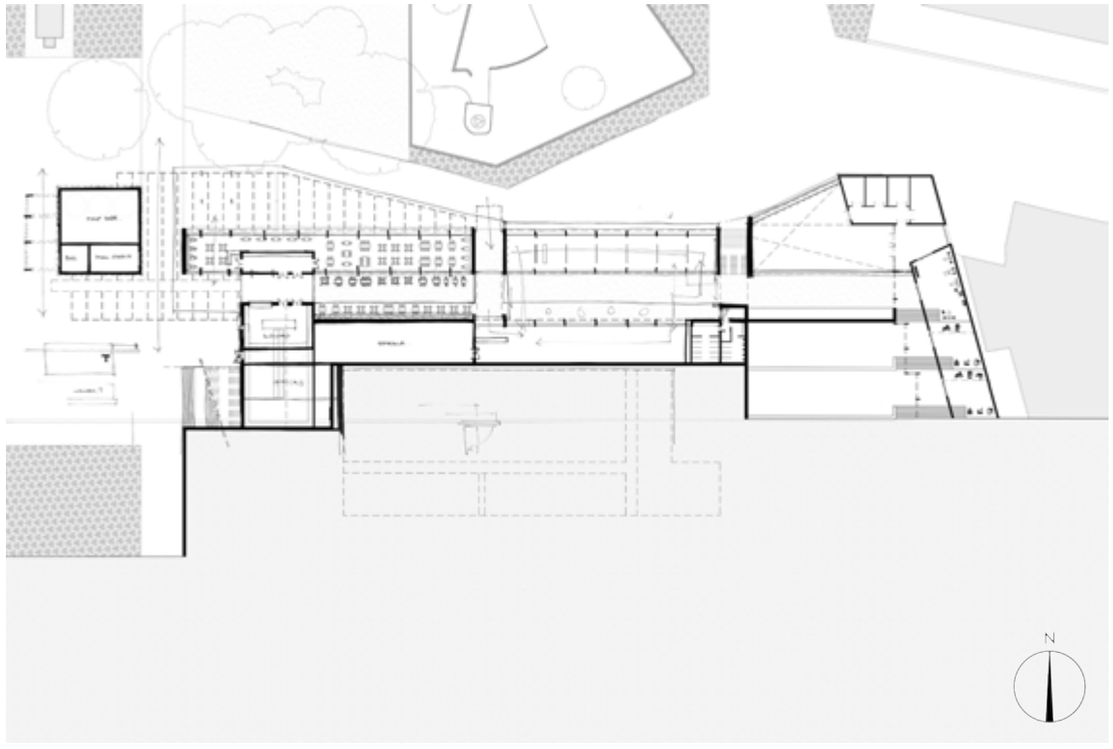


Figure 99

Figure 100

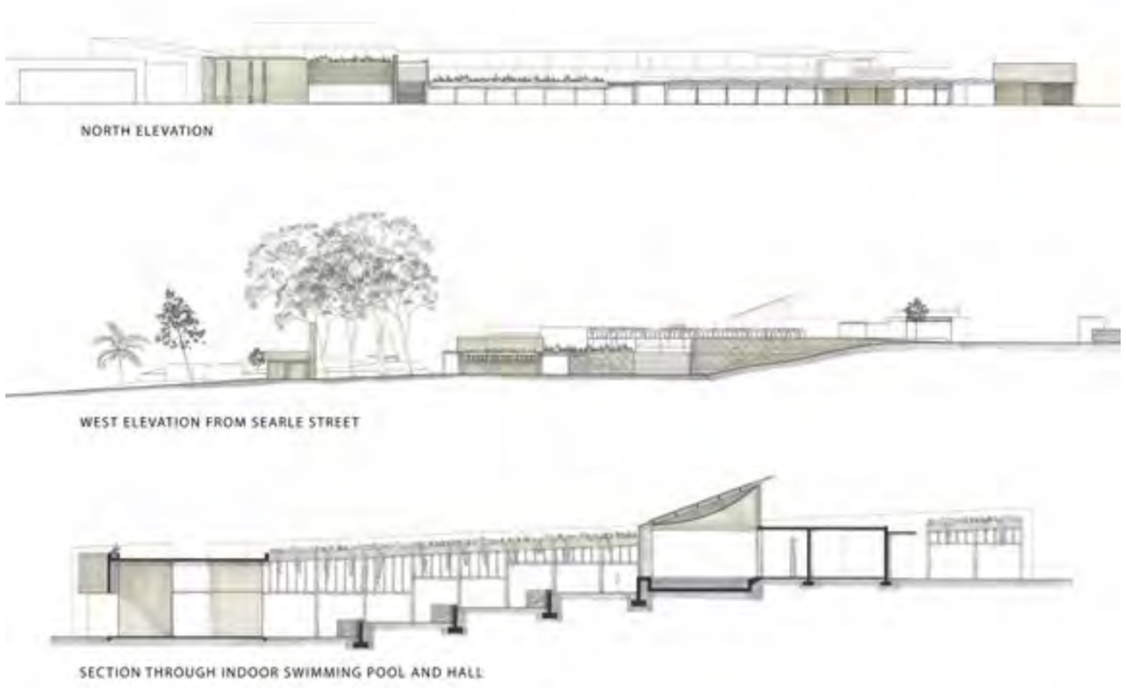


Figure 101

Figure 86-97: Development Sketches for the Swimming Pool Precinct.

Figure 98 : Upper Ground Floor Plan, October 2016

Figure 99 : Lower Ground Floor Plan, October 2016

Figure 100 : Detailed section through gym, October 2016

Figure 101 : Elevations and Section.

CONCLUSION

The City of Cape Town is littered with Parks that are underutilised as a result of fences and controlled access. The design dissertation explores the possibility of an alternative approach to dealing with the edge conditions of these public spaces in an effort to increase accessibility and enable freedom of activity within these environments. The design dissertation project began with my interest in degraded or underutilised sites as appropriate locations for architectural interventions. Solà-Morales' notion of the terrain vague led my research to a photographic expedition of the vacant desolate sites of central Cape Town and revealed that it is the edge condition of these spaces which give them the characteristics that make them terrain vague. The unravelling of the boundary from a state of order to disorder and ultimately the return of nature on sites that are left to deteriorate directed the research to an interrogation of the edge condition and onto the historical fortifications of Table Bay. The research revealed that the French Lines were the eastern boundary of the old Cape Settlement and represented the line of the settlers control of the land versus the disorder of the wilderness beyond. The remaining Central Redoubt took the research to Trafalgar Park, located in the suburb of Woodstock between the Harbour and Devil's Peak. A visit to Trafalgar Park quickly revealed that the various edge conditions controlling access has resulted in a severely underutilised public park. This demonstrated that it is the parks in the City of Cape Town which offer the opportunity for alternative activities which Solà-Morales prescribes to the terrain vague of dense urban environments. The replacement of restrictive boundary conditions with pedestrian routes and architectural interventions which mediate between public spaces has the ability to reactivate the parks of the City. The dissertation design aims to re-activate Trafalgar Park through the manipulation of its edge conditions to enable accessibility and promote public space through an environmentally responsive approach to design. The Swimming Pool Precinct was identified as the site for the major architectural intervention as it is an already impacted area within the Park that is underused and in need of improvement. The proposed design redefines the various topographical and built edge conditions of the Swimming Pool Precinct with architectural interventions that aim to increase activity and reconnect the fragmented Park.

Figure 102: The embankment between the parking area and the informal sports fields with Devil's Peak in the background.

Figure 103: The stone walls at the entrance to the Central Redoubt.

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